

Coastal Pines Technical College

Catalog & Student Handbook 2024-2025



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General Information

Coastal Pines General Information

The statements set forth in this catalog are for informational purposes only and should not be construed as the basis of a contract between the students and this College. While the provisions of this catalog will ordinarily be applied as stated, Coastal Pines Technical College reserves the right to change any provision listed, including but not limited to, academic requirements for graduation, without actual notice to individual students. Every effort shall be made to keep students advised of any such changes. Information on changes will be made available in the Student Affairs Office and the Catalog Addendum. It is important that students know it is their responsibility to remain informed of all changes including academic requirements for graduation. This document remains effective until publication of the next catalog.

Mission

Coastal Pines Technical College, a unit of the Technical College System of Georgia, is a multi-campus, two-year college in Southeast Georgia that supports the workforce development and lifelong learning needs of communities, businesses, and industries. Through traditional and distance delivery formats, the learner-centered College offers associate degree, diploma, and technical certificate programs; continuing education opportunities; adult education services; and customized training for economic advancement.

Vision

Coastal Pines Technical College will be the premier, regional center of higher education for student learning and community development.

Warranty

As a demonstration of our confidence in the quality of our Technical College programs, the Technical College System of Georgia warrants every graduate of a Technical College program offering a technical certificate of credit, diploma, or associate degree.

The warranty guarantees that the graduate has demonstrated the knowledge and skills and can perform each competency as identified in the industry-validated Standard or Program Guide. Any program graduate who is determined to lack such competence shall be retrained at no cost to the employer or graduate for tuition or instructional fees. A claim against the warranty may be filed by either an employer in conjunction with a graduate or a graduate if the individual is unable to perform one or more of the competencies in the industry-validated Standard or Program Guide, including failure to pass a State of Georgia required licensing examination.

The warranty shall remain in effect for two years immediately following the date of graduation and shall be honored by any Technical College that offers the program from which the individual graduated. To inquire or file a warranty claim, contact the Vice President for Academic Affairs.

Statement of Non-Discrimination and Compliance

Coastal Pines Technical College (CPTC) a unit of the Technical College System of Georgia does not discriminate on the basis of race, color, creed or religion, national or ethnic origin, sex (including pregnancy, sexual orientation, and gender identity), disability, age, political affiliation or belief, genetic information, veteran or military status, marital status, or citizenship status (except in those special circumstances permitted or mandated by law).

This nondiscrimination policy encompasses the operation of all Technical College-administered program, programs financed by the federally government including Workforce Innovation and Opportunity Act (WIOA)

Title I financed programs, educational programs, and activities including admissions, scholarships and loans, student life and athletics. It also encompasses the recruitment and employment of personnel and the contracting for goods and services.

The Technical College System and technical colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity. The following persons have been designated to handle inquiries regarding Coastal Pines Technical College nondiscrimination policies:

Title IX, EEO and AA Coordinators for All Employees:

Human Resources Director

Katrina Howard
1777 West Cherry Street
Jesup, Georgia 31545
(912) 427-5876
khoward@coastalpines.edu

Human Resources Coordinator

Emily Harris
1701 Carswell Avenue
Waycross, Georgia 31503
(912) 287-4098
eharris@coastalpines.edu

Title IX, ADA & Section 504 Coordinator for All Students:

Coastal Pines Technical College is committed to providing an environment that emphasizes the dignity and worth of every member of its community and that is free from harassment and discrimination based upon race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation. Such an environment is necessary to a healthy learning, working, and living atmosphere because discrimination and harassment undermine human dignity and the positive connection among all people at the College.

It is the purpose of this procedure to ensure that all students within the Technical College System of Georgia (TCSG) and its colleges are provided access to a safe educational environment free from any discrimination on the basis of sex. The U.S. Department of Education's Office for Civil Rights (OCR) enforces, among other statutes, Title IX of the Education Amendments of 1972 (20 U.S.C. 1681 et seq.) states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance". To that end, this procedure prohibits sex discrimination of any kind, including sexual harassment and sexual misconduct ("prohibited conduct"). Sexual misconduct includes, but is not limited to, domestic violence, sexual violence, dating violence, sexual assault, sexual exploitation, and stalking.

Individuals wishing to report reporting sexual harassment, sexual violence, and sexual misconduct and/or to make inquiries concerning the application of Title IX at the College may contact:

Student Success Coach/Disability Services

Macy Evans
1701 Carswell Avenue
Waycross, Georgia 31503
(912) 285-6361 (office)
(912) 424-3645 (cell)
mdevans@coastalpines.edu

Telephone numbers are accessible to persons who are deaf or hard of hearing through the Georgia Relay by dialing 711 or 1-800-255-0056 from a TTY/TDD.

El Sistema de Universidad Técnica de Georgia y sus constituyentes colegios técnicos no discrimina basándose en raza, color, credo, nacional u origen étnico, género, religión, discapacidad, edad, afiliación política o creencia, información genética, discapacitado veterano, veterano de la Era de Vietnam, o condición de ciudadanía (excepto en aquellas circunstancias especiales permitidos o impuestas por ley). Esta política de no discriminación abarca la operación de todos TCSG y programas administrados por el colegio técnicos, programas financiados por el gobierno federal, los programas educativos y actividades de admisiones, becas y préstamos, vida estudiantil y atletismo. También se aplica a la contratación y el empleo de personal y la contratación de bienes y servicios.

El Sistema Técnico de Universidad y colegios técnicos promoverán la realización de la igualdad de oportunidades a través de un programa positivo continuo de prácticas específicas destinadas a garantizar la plena realización de la igualdad de oportunidades. Las siguientes personas han sido designadas para manejar las preguntas sobre las políticas de no discriminación de Coastal Pines Technical College.

Coordinador de Título IX,EE0/AA

Katrina Howard
1777 West Cherry Street
Jesup, Georgia 31545
(912) 427-5876
khoward@coastalpines.edu

*Los números de teléfono son accesibles a las personas que son sordos o con pérdida de la audición a través de Georgia Relay marcando 711 o 1-800-255-0056 de TTY/TDD.

Main Campus and Instructional Sites

Waycross Campus (Main)

1701 Carswell Ave
Waycross GA 31503
912-287-6584

Alma Instructional Site

101 West 17th Street
Alma GA 31510
912-632-0951

Baxley Instructional Site

1334 Golden Isles Pkwy W
Baxley GA 31513
912-367-1700

Camden Instructional Site

100 Keith Dixon Way
Kingsland, GA 31548
912-522-4510

Camden Center

Cosmetology Program
8001 The Lakes Blvd
Kingsland, GA 31548
912-510-3300

Hazlehurst Instructional Site

677 Douglas Hwy
Hazlehurst GA 31539
912-379-0041

Golden Isles Instructional Site

3700 Glynco Parkway
Brunswick GA 31525
912-262-4999

Jesup Instructional Site

1777 West Cherry Street
Jesup GA 31545
912-427-5800

Ware State Prison

3620 North Harris Road
Waycross, GA 31501
(Closed to the public)

Federal Correction Institute, Jesup

2600 US Hwy 301 S
Jesup GA 31599
912-427-0870
(Closed to the public)

High School Instructional Sites

Appling County High School
Bacon County High School
Brantley County High School
Brunswick High School
Camden County High School
Charlton County High School
Clinch County High School
Glynn Academy
Golden Isles Career Academy
Jeff Davis High School
Long County High School
McIntosh County Academy
Pierce County High School
Ware County High School
Wayne County High School

Accreditation and Program Approvals

Institutional Accreditation

Coastal Pines Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate degrees. Coastal Pines Technical College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Coastal Pines Technical College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

Program Accreditation

Program	Location	Accreditation or Certification Board
Automotive Technology	Waycross Campus	National Automotive Technicians Education Foundation (NATEF)
Air Conditioning Technology	Waycross Campus, Golden Isles, and Jesup sites	HVAC Excellence
Medical Assisting	Waycross Campus	Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB)
Paramedicine	Waycross Campus	Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Emergency Medical Services Professions (CoAEMSP)
Radiologic Technology	Waycross Campus	Joint Review Committee on Education in Radiologic Technology (JRCERT)
Respiratory Care Technology	Waycross Campus	Commission on Accreditation for Respiratory Care (Co ARC)
Surgical Technology	Waycross Campus	Coastal Pines Technical College Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Commission on Accreditation of Allied Health Education Programs. The program has been placed on Probationary Accreditation as of November 19, 2021.

Program Approvals

Program	Location	Certification or Approval Board
Computer Information Systems	Waycross Campus, Golden Isles, and Jesup sites	Authorized Microsoft IT Academy and Authorized Cisco Network Academy
Cosmetology	Waycross Campus, Alma, Camden, Golden Isles, and Jesup sites	Georgia Board of Cosmetology
Early Childhood Care and Education	Waycross Campus, Baxley, and Jesup sites	Bright from the Start: Georgia Department of Early Care and Learning (DECAL) and Georgia Professional Standards Commission
Neuromuscular Massage Therapy	Golden Isles site	Assigned school by the National Certification Board for Therapeutic Massage & Bodywork (NCBTMB) Georgia Board of Massage Therapy
Nurse Aide	Waycross Campus, Alma, Baxley, Golden Isles, Hazlehurst, and Jesup sites	Georgia Medical Care Foundation
Nursing, ASN	Jesup Campus	Georgia Board of Nursing
Paramedicine Advanced Emergency Medical Technician (AEMT) Emergency Medical Technician (EMT) EMS Professions Pre-Hospital EMS Operations	Waycross Campus, Baxley, Golden Isles, and Jesup sites	Georgia Department of Community Health, Office of Emergency Management Service and Trauma
Practical Nursing Program	Waycross Campus, Alma, Baxley, Golden Isles, and Jesup sites	Georgia Board of Nursing

Coastal Pines Board of Directors

Coastal Pines Technical College's Board of Directors is composed of members representing the college's designated thirteen-county service area.

The CPTC board members represent a variety of business, industry, and economic development backgrounds and bring with them a wealth of experience and wisdom. Board members often communicate community needs to the President and administration; and as a result, CPTC considers its local Board of Directors a vital asset in the quest to fulfill the mission of the college. The local Board meets monthly, and the actions of the Board are recorded in the official minutes of each board meeting.



Lee Lewis, Chair
Appling County



Dewayne Johns
Brantley County



Artie Jones Jr.
Camden County



Dialo Cartwright
Glynn County



Kurt Davis
Jeff Davis County



Jason Rubenbauer
Ware County



Ralph Staffins, III
Glynn County



Kristina Foreman
Ware County



Summer Stipe
Pierce County



Ted Buford
Wayne County

State Board of the Technical College System of Georgia

The State Board of the Technical College System of Georgia is responsible for establishing standards, regulations and policies for the operation of the Technical College System of Georgia, the state's 22 technical colleges, economic development programs, and adult education programs. The Board strives to promote the economic well-being of Georgia citizens by ensuring high-quality training and upgrade training and services as a full partner in the expansion of Georgia's economic base.



1st Congressional District
Mike Long



2nd Congressional District
Carvel Lewis



3rd Congressional District
Frank S. "Chunk" Newman



4th Congressional District
Fran Millar



5th Congressional District
Joseph Hsia



6th Congressional District
Corey Ferguson



7th Congressional District
Buzz Law, Vice Chair



8th Congressional District
Calder B. Clay, III



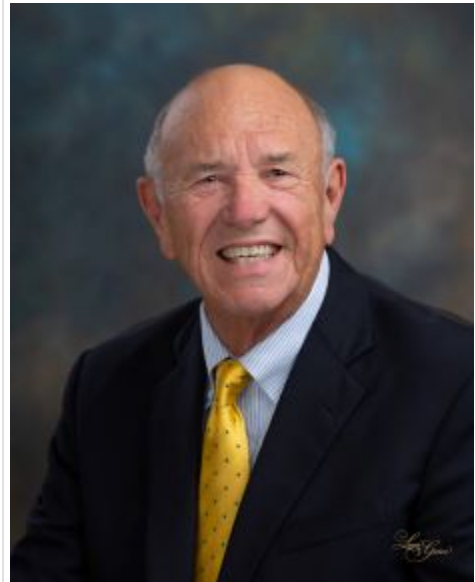
9th Congressional District
Lee Chapman



10th Congressional District
Robert Aysband, Jr.



11th Congressional District
Jay Cunningham



12th Congressional District
Doug Lambert



13th Congressional District
Dr. Artesius Miller, Chair



14th Congressional District
John Thomas

Members at Large

Ben Bryant
Randall Fox
Shirley Smith
Howard Clifford (Trey) Sheppard, III - Chair
Tim Williams
Daren C. Wayne
Tim Perryman
Charlie Fiveash

2024-2025 College Calendar

This is the overall CPTC semester calendar and it is subject to change. Individual classes and programs may have different start and end dates.

FALL SEMESTER August 19, 2024 - December 10, 2024	
Tuition Due Date	08/15/24
FALL SEMESTER BEGINS	08/19/24
Last day to Drop and receive tuition adjustment	08/22/24
Last day to Add classes	08/22/24
Last day to charge in the Bookstore	08/29/24
Labor Day Holiday - College Closed	09/02/24
Spring Semester 2024 Returning Student Registration Begins	10/14/24
Spring Semester 2024 New Student Registration Begins	10/21/24
Thanksgiving Break for Students	11/26 - 11/29/24
Final Exams	12/09/24 12/10/24

SPRING SEMESTER January 13, 2025 - May 7, 2025	
Tuition Due Date	01/09/25
SPRING SEMESTER BEGINS	01/13/25
Last day to Drop and receive tuition adjustment	01/17/25
Last day to Add classes	01/16/25
Martin Luther King - College Closed	01/20/25
Last day to charge in the Bookstore	01/23/25
Summer Term 2025 Returning Student Registration Begins	03/03/25
Summer Term 2025 New Student Registration Begins	03/10/25
Staff Development Day – Student Holiday	03/26/25?
Spring Break for Students	03/31 - 04/04/25
SPRING SEMESTER ENDS	05/07/25
Final Exams	05/06/25 05/07/25

*This is the overall CTPC semester calendar. Individual classes and programs may have different start and end dates.

SUMMER TERM May 19, 2025 - July 31, 2025	
Tuition Due Date	05/15/25
SUMMER TERM BEGINS	05/19/25
Last day to Drop and receive tuition adjustment	05/23/25
Last day to Add classes	05/22/25
Memorial Day Holiday - College Closed	05/26/25
Last day to charge in the Bookstore	5/29/25
Fall Semester 2025 Returning Student Registration Begins	06/16/25
Fall Semester 2025 New Student Registration Begins	06/23/25
Summer Break for Students	07/02 - 07/05/25
Independence Day Holiday observed - College Closed	07/04/25

SUMMER TERM May 19, 2025 - July 31, 2025	
SUMMER TERM ENDS	07/31/25
Final Exams	07/31/25

2024-2025 Holidays - Campus Closed	
Labor Day	September 2, 2024
Thanksgiving Holidays	November 26 - 29, 2024
Christmas Holidays	December 25, 31, 2024
New Year's Holiday	January 1, 2025
Martin Luther King Day	January 20, 2025
Memorial Day	May 26, 2025
Independence Day observed	July 3, 2025

Admissions Information

Admissions Overview

The admissions policy and procedures of the State Board of the Technical College System of Georgia and the admissions procedure of Coastal Pines Technical College assure the citizens of Georgia equal access to the opportunity to develop the knowledge, skills, and attitudes necessary for them to secure personally satisfying and socially productive employment. By design and implementation, the policy and procedures will:

- Be nondiscriminatory to any eligible applicant regardless of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, or citizenship status (except in those special circumstances permitted or mandated by law).
- Increase the prospective student's opportunities
- Guide the implementation of all activities related to admission to Coastal Pines Technical College and its programs, to student financial aid, and to the recruitment, placement, and retention of students
- Complement the instructional programs of Coastal Pines Technical College

Admissions Process

Admission to CPTC is a multi-step process that consists of an evaluation of prior academic experience and assessment for postsecondary readiness of eligible applicants.

Eligible Applicants: Individuals 16 years of age or older or dually/jointly enrolled high school students in 9th, 10th, 11th, or 12th grades who seek access to quality instruction at the post-secondary level are eligible for admissions.

Required Academic Criteria

To be admitted by Coastal Pines Technical College, applicants must satisfy one of the six academic readiness paths below:

1. High school graduates must submit an official high school transcript (including graduation date) that reflects the student has met the attendance, academic, and/or assessment requirements for the state's board of education or equivalent agency.
 - Secondary schools must be accredited by an agency included on the TCSG approved accreditation agency list.
 - Applicants with diplomas from secondary schools located outside the United States must have their transcripts evaluated for equivalency by an approved outside evaluation organization.
 - High school Certificates of Attendance or other certificates, credentials, or documents where the student did not complete all required coursework or testing required for a high school diploma in that state are not recognized for admission purposes.
2. Submission of an official transcript reflecting the student has passed an examination or the completion of a program the state recognizes as the equivalent of a high school diploma (e.g. GED, HiSET, Career Plus HSE).
3. The only exception to requirements 1 or 2 is for those students seeking enrollment into an approved basic workforce certificate that does not require a high school diploma or high school equivalency for admission.
4. Submission of an official transcript from each of one or more previously attended postsecondary institutions (accredited by an accepted accrediting agency) reflecting the successful completion (C or better) of a minimum of 30 semester or 45 quarter credit hours of coursework at the degree level.
5. Applicants who were home schooled in the state of Georgia and did not attend a recognized accredited program must submit:

- Certificate of Attendance form from the local superintendent's office or a Declaration of Intent to utilize a Home Study Program from the Georgia Department of Education verifying that the parent or legal guardian complied with the requirements of home study programs as referenced in O.C.G.A. § 20-2-690.
 - Annual progress reports or a final transcript for the equivalent of the home-schooled student's junior and senior years (the final progress report or transcript must include the graduation date).
6. Applicants who were home schooled outside the state of Georgia and did not attend a recognized accredited program must submit:
- annual progress reports or a final transcript for the equivalent of the home-schooled student's junior and senior years (the final progress report or transcript must include the graduation date); and
 - one of the following:
 - PSAT, SAT, or ACT scores that meet or exceed the TCSG system and college minimum score requirements for program readiness.
 - ACCUPLACER placement scores that meet or exceed the TCSG system and college minimum score requirements for program readiness.
7. Service members of the U.S. Air Force, Army, Coast Guard, Marines, or Navy may submit an official copy of their DD Form 214 or other official documentation of military service indicating high school graduate or equivalent.

The President of Coastal Pines Technical College may waive the high school diploma/high school equivalency, as described above, the requirement for those pursuing a high school equivalency, as described above, who are otherwise eligible to enroll in a specific program of study.

Assessment of Program Readiness

1. Coastal Pines Technical College must evaluate students' readiness for a degree, diploma, and certificate programs. The College may accept a student's official entrance score on the following validated assessment instruments if the scores meet the required minimums:

- SAT
- ACT/Pre-ACT
- PSAT
- TABE 9-10 scores of 461 or higher in reading and 442 or higher in math for placement into entry-level workforce certificate programs
- TABE 11/12 scores of 501 in Reading for Levels M and D and 496 for Mathematics on Levels M and D. A score of 536 for Reading if using Level A and 537 for Mathematics if using Level A.
- Georgia Milestones Literature & Composition or Georgia Milestones American Literature & Composition (English admission requirement only)
- HOPE GPA after completion of 10th grade of 2.6 or higher
- High School GPA of 2.0 for approved Entry-Level Workforce Certificates
- GED® Math or Reading must meet the minimum passing score is used for placement into any certificate, diploma, or degree program
- Completed TCSG form documenting two years of work/career-related experience for approved Entry-Level Workforce Certificates
- ACCUPLACER/Companion
- COMPASS/Asset

*A student possessing an Associate's degree or higher from a regionally accredited institution shall be exempted from placement requirements.

2. Official transcripts from a regionally or nationally accredited institution approved by the United States Secretary of Education documenting equivalent program-level English and math coursework successfully completed (C or better) at other post-secondary institutions may be used to document a student's basic education skills and eliminate the need to complete that portion of the assessment instrument.

3. Subjective criteria such as, but not limited to, written or oral interviews, personality assessments, and letters of reference shall not be utilized as a part of the evaluation for program readiness or admission. All criteria should be published and applied consistently to all applicants for a program.

Minimum admissions requirements for each diploma/degree program are established in accordance with the Technical College System of Georgia standards.

Students shall be admitted to Coastal Pines Technical College in one of the following categories: Regular, Provisional, Pending Admit, Special, or Transient.

Regular Status

Students who meet all requirements for admission into a selected program and are eligible to take all courses in the program curriculum are granted regular admission status.

Provisional Status

Students who do not meet all requirements for regular admission into a selected program are granted provisional admission status. Provisionally admitted students may take learning support classes, and certain specified occupational courses as long as class pre- and co- requisites are satisfied.

All certificate, diploma, and associate degree program students initially admitted on a provisional basis must have satisfactorily completed the necessary prerequisite and learning support course work in order to progress through the State Standard Curriculum.

Dual Enrollment students are not eligible for Provisional Admission status.

Special Admit Status (Non-credential seeking)

Applicants who wish to take credit coursework, but are not seeking a certificate, diploma, or associate degree are granted Special Admit status. The following specifics define the parameters of this status:

- May apply up to a maximum of 25 quarter or 17 semester credit hours into a specific program for credential seeking purposes after achieving regular admit status. The number of hours taken as a special admit student in no way waives the requirements of the regular admission process.
- May enroll in classes only on a space-available basis.
- Must adhere to the specific institutional prerequisite requirements when selecting courses.
- Will not be eligible for any financial aid.

Pending Admit Status (High School Seniors only)

Applicants who are in their final year of high school and are applying for a college term immediately after they graduate are granted Pending Admit Status. The following specifics define the parameters of this status:

- Applicants must submit a transcript showing the applicant is on track for completing all required high school courses before the semester they wish to enroll.
 - A letter from the high school confirming the pending completion is encouraged to be sent with the transcript.
- Will be allowed to register for courses after course placement requirements have been met.
- These applicants are not eligible for federal financial aid until a final high school transcript has been received.

Transient Status

Students who submit a Transient Agreement Letter from their home institution are granted Transient admission status. The Transient Agreement Letter must verify that the student is in good standing and must list the courses the student is eligible to take. A current Transient Agreement Letter is required for each term of enrollment.

Readmission to the College

Students who have not attended CPTC in the past calendar year or who have enrolled at another institution must complete a new CPTC admission application. Applicants must provide transcripts from each institution attended since last being enrolled at CPTC. Applicants who are not in good academic standing at their former institution will be accepted on academic probation.

Students dismissed or suspended from CPTC for academic reasons may apply to re-enter after completing the designated absence. Consideration of the application for readmission will be made by the Vice President for Academic Affairs. Reapplying does not guarantee acceptance.

Upon re-entry to the college, regardless of the reason, all students must follow standards, policies, and regulations that are in effect at the time of re-entry. A change of program is considered a re-admission and application to change a program must be made through the Office of Admissions.

Georgia Residency Requirements

CPTC is responsible for the verification of the lawful presence of every successfully admitted student as required by state and federal immigration laws. Legal residence in the state of Georgia requires the establishment of a domicile in the State of Georgia with the intent to remain indefinitely. Coastal Pines Technical College has the responsibility of evaluating each application, while the student has the responsibility of conveying current and accurate residency information. This information is used in determining the appropriate tuition rate to be paid by each student. In accordance with the policy of the Technical College System of Georgia, CPTC recognizes three student residency categories: Georgia Resident, Out-of-State Student, and Non-Citizen Student. The rate of tuition charged is based on a student's status on the first day of the term.

Students applying for in-state tuition must submit at least one secure and verifiable document defined in Georgia Code Section 50-36-1.

Determining a student's residency status must be based on the existence of surrounding objective circumstances that indicate a student's intent to maintain a permanent presence, or Domicile, in the State of Georgia. No single factor is conclusive. Similarly, there is no predetermined number of factors required to be met. The following indicators may be considered when documenting the Domicile of an individual, but this is not an exhaustive list:

- Location of employment.
- Location of voter registration.
- Location of property, including home purchase, and taxes paid thereon.
- State for which the individual filed and paid state income taxes.
- Address and other information on federal and state income tax returns.
- State where the person's automobile title is registered and the payment of property taxes thereon.
- Address on driver's license and state of issuance.
- Address on the Georgia Driver's License Bureau ID.
- Reason for initially coming to Georgia.
- State of issuance of business, professional, or other licenses.
- Location of checking, savings, or other banking accounts.

Citizenship Requirements:

- A student meets the Citizenship Requirements, for purposes of this procedure and the related policies, if he or she is a United States Citizen, born or naturalized.
- A student meets the Citizenship requirements, for purposes of this procedure and the related policies, if he or she is an Eligible Non-Citizen, according to the Federal Title IV definition.
- Ineligible Non-Citizens: A Non-Citizen cannot qualify for in-state tuition. However, in the discretion of the President of the college the international tuition may be waived in favor of an out of state tuition rate for a Non-Citizen who has been verified as lawfully present in the United States in accordance with state and federal immigration laws.

Verification of Lawful Presence

Effective January 1, 2012, all students applying for in-state tuition must provide validation of lawful presence in the United States. The following documents will serve as proof of lawful presence in the United States and documentation will be required before a student is eligible for consideration of in-state tuition:

- Students who file a FAFSA (Free Application for Federal Student Aid) and are eligible for federal student aid will have their lawful presence verified as part of the FAFSA process.

- A clear copy of an original or certified U.S. Birth Certificate showing the student was born in the U.S. or a U.S. territory, A U.S. Certificate of Birth Abroad issued by the Department of State (DS-1350) or a Consular Report of Birth Abroad (FS-240). The copy must very clearly show the raised or written seal to be acceptable.
- A U.S. Certificate of Naturalization (USCIS form N-550 or N-570).
- A U.S. Certificate of Citizenship (USCIS form N-560 or N-561).
- A current U.S. Passport.
- Unexpired Georgia and select out-of-state driver's licenses and state ID cards can be accepted under certain conditions. **It must be a Real ID and not contain any of the verbiages in the [chart below](#).** If the copy received has the top portion of the card cut off the document will not satisfy lawful presence.
- A current military ID (service member only, not dependent). Documented using the Confirmation of Review of Military ID Worksheet - A photocopy is not acceptable.
- A current, valid Permanent Resident Card (USCIS form I-151 or I-551). We require both the front & back sides of your Permanent Resident Card to be submitted. It must not expire before the first day of class of the term the student will start classes.
- Students admitted on an F, J, or M Visa will have their lawful presence verified through the Student and Exchange Visitor Information System (SEVIS).
- Students admitted on any other Visa will have their lawful presence verified through the Systematic Alien Verification for Entitlements (SAVE) Program.

State	DL/ID Requirements for Acceptance
Alabama	Must NOT be marked "FN"
Alaska	Must NOT be marked "Limited Term"
California	Must NOT be marked "Limited Term." Instruction Permits, Commercial Learner's Permits, and temporary licenses cannot be accepted.
Delaware	Must NOT be marked "Limited Term" or "Temporary"
Florida	Must NOT be marked "Temporary"
Georgia	Must NOT be marked "Limited Term"
Idaho	Must NOT be marked "Limited Term"
Iowa	Must NOT be marked "Limited Term"
Kentucky	Must NOT be marked "Not for REAL ID purposes"
Louisiana	Must NOT be marked "Limited Term"
Maryland	Must NOT indicate "T" restriction
Missouri	Must NOT be marked "Limited Term"
Montana	Must NOT be marked "Limited Term" or "Temporary"
Nevada	Must NOT be marked "Limited Term"
North Carolina	Must NOT be marked "Limited Term"
Ohio	Must NOT indicate that it is "nonrenewable and nontransferable"
Oklahoma	Must NOT be marked "Temporary"
South Carolina	Must NOT be marked "Limited Term"
Tennessee	Must NOT be marked "Temporary"
Texas	Must NOT be marked "Limited Term" or "Temporary"
Vermont	Must NOT be marked "Limited Term"
Wisconsin	Must NOT be marked "Limited Term"

Any student who cannot be verified as lawfully present in the United States is not eligible to be considered for in-state tuition, regardless of how long he or she has lived in Georgia. In addition to being lawfully present in the United States, students must meet the in-state tuition requirements as outlined in TCSG Board Policy and Procedure 6.2.2 to warrant an in-state classification. Students that are initially classified as out-of-state and successfully petition to have their residency changed to in-state also have to meet the verification requirement.

Placement Testing

Coastal Pines Technical College (CPTC) believes that a student must have the basic educational skills necessary to be successful. The assessment provides CPTC the opportunity to serve the students better through quality placement. The official placement exam approved for use by Coastal Pines Technical College and sanctioned by the Technical College System of Georgia is the ACCUPLACER exam. However, in the place of ACCUPLACER, CPTC may accept a student's official entrance score on any TCSG validated assessment instrument. This placement exam evaluates reading, writing, math, and algebra skills.

Applicants must show a photo I.D. to gain entrance to the testing session. Students who do not possess a photo I.D. may notify the Admissions Office in advance of testing and prove identification through a combination of birth certificate, social security card and other forms of identification. An applicant who does not possess photo identification at the time of testing and who has not made prior arrangements will not be allowed to test.

[What is the Accuplacer Test?](#)

[Accuplacer Study App](#)

[Accuplacer Study App Login Info](#)

Accuplacer Reading Preparation

[Video 1](#)

[Video 2](#)

Accuplacer Sentence Skills Preparation

[Video 1](#)

[Video 2](#) (Part 1)

[Video 3](#) (Part 2)

Accuplacer Arithmetic Preparation

[Video 1](#)

[Video 2](#)

Accuplacer Elementary Algebra Preparation

[Video 1](#) (Part 1)

[Video 2](#) (Part 2)

[Video 3](#) (Part 3)

Applicants will be admitted with regular status to an **associate degree program** with the following scores:

Test	Reading	Writing	Numerical	Algebra
NEXT GENERATION ACCUPLACER	236	249		245
CLASSIC ACCUPLACER	64	70		57
ASSET	41	40		42
COMPASS	79	62		37
SAT*	17	17	21	
PSAT (after March 2016)	17	17	21	
ACT/PACT	16	14	17	
GA Milestones ELA	525	525		
GED (2014 and after)	145		145	
HOPE GPA (after 10th grade)	2.6			

If an applicant has earned an AAS/AS or higher, they are eligible for degree level courses.

Applicants will be admitted with regular status to a **diploma or certificate program** (with the exception of Commercial Truck Driving, Nurse Aid, and Business & Customer Service Technician) with the following scores:

Test	Reading	Writing	Numerical	Algebra
NEXT GENERATION ACCUPLACER	224	236	229	
CLASSIC ACCUPLACER	55	60	34	
ASSET	38	37	32	
COMPASS	70	32	26	
SAT*	16	15	18	
ACT/PACT	14	13	14	
PSAT (after March 2016)	16	15	18	
GAHSGT	235	235		
GA Milestones ELA	525	525		
GED (2014 and after)	145		145	
HOPE GPA (after 10th grade)	2.6			

If an applicant has earned an AAS/AS or higher, they are eligible for diploma-level courses.

The following programs are Entry Level Workforce Certificates.

Administrative Support Assistant (AS21)	Basic Timber Harvesting (BT41)	Gas Metal Arc Welder (GM31)
Advanced Shielded Metal Arc Welder (OSM1)	Certified Construction Worker (CCW1)	Gas Tungsten Arc Welder (GTA1)
Advanced Emergency Medical Technician (AEMT)	Child Development Specialist (CD61)	Heavy Diesel Service Technician (HS31)
Air Conditioning Electrical Technician (ACK1)	CNC Specialist (CS51)	Help Desk Specialist (HD41)
Air Conditioning Technician Assistant (AZ31)	Commercial Wiring (CW31)	Industrial Fluid Power Technician (IF11)
Auto/Electrical/Electronics Systems Technician (AE41)	CompTIA A+ Certified Preparation (CA61)	Introduction to Criminal Justice (IT51)
Automotive Chassis Tech. Specialist (ASG1)	CompTIA A+ Certified Technician Preparation (CA71)	Landscape Specialist (LS11)
Automotive Climate Control Tech. (AH21)	Crime Scene Fundamentals (CZ31)	Manufacturing Maintenance Fundamentals (MM11)
Automotive Collision Repair Assist. I (AB51)	Diesel Electrical & Electronic Systems Technician (DE11)	Microsoft Office App. Professional (MF41)
Automotive Collision Repair Assist. II (AZ51)	Diesel Engine Service Technician (DE21)	Microsoft Office App. Specialist (MF51)
Automotive Engine Performance Tech. (AE51)	Drafter's Assistant (DA31)	Microsoft Word App. Professional (MWA1)
Automotive Engine Repair Tech. (AE61)	Early Childhood Care & Education Basics (EC31)	Mobile Electronics Technician (ME61)
Automotive Refinishing Assist. II (AP71)	Electrical Lineworker (EL11)	Office Accounting Specialist (OA31)
Automotive Transmission/Transaxle Tech Specialist (AA71)	Emergency Medical Technician (EMJ1)	Small Business Marketing (SB51)
Basic Shielded Metal Arc Welder (FS31)	Garden Center Technician (GC31)	Timber Harvesting Operations (THO1)

****Prep Cook (PC51), **Shampoo Technician (ST11)**

**** Dual Enrollment Only**

Applicants will be admitted to these programs if they have met regular diploma or certificate level score requirements or have met the requirements listed below:

Test	Reading	Writing	Numerical	Algebra
NEXT GENERATION ACCUPLACER	218	222	223	
CLASSIC ACCUPLACER	36	30	23	

ASSET	29	32	29	
COMPASS	46	15	17	
High School GPA	2.0			
TABE 9-10 (Levels M, D, or A)	461		442	
TABE 11-12 (Levels M & D)	501		496	
TABE 11-12 (Level A)	536		537	
Experienced Worker	Must show 2 years of successful work experience in same field			

*The SAT was redesigned on March 1, 2016. The scores in the table above reflect scores from SATs taken after that date. For SAT scores before that date, a SAT Math score of 380 or higher for degree programs and 310 or higher for diploma programs exempts placement testing. For SAT Critical Reading scores before March 1, 2016, a score of 290 for degree programs and 270 for diploma programs exempts placement testing.

The following programs do not require a high school diploma:

Business & Customer Service Technician, Commercial Truck Driver, and Nurse Aid

General Reminders

- Bring a picture ID for entry into the testing lab
- Do NOT bring cell phones or children with you to the test
- Allow two to three hours to take test

Some allied health diploma and degree programs have competitive entry processes that vary among programs. Contact the appropriate program director for specific information.

Competitive entry requirements for each program may be found on the CPTC Allied Health Program web page at <https://coastalpines.edu/programs/allied-health> or contact the Admissions Office.

Courses where students have received exemptions, through articulation, or passed a CLEP exam are not eligible for competitive admissions points and cannot be used to calculate qualifying GPAs for program admission.

Special Considerations for Clinical/Externship/Internship Programs

- Some clinical site facilities require a criminal background check for the purpose of clinical placements. Clinical placements are required components of the allied health program of study. All fees and expenses associated with a criminal background check are the responsibility of the student and are non-refundable.
- Some clinical site facilities require a drug screen for the purpose of clinical placements. Clinical placements are required components of the allied health program of study. All fees and expenses associated with a drug screen are the responsibility of the student and are non-refundable.
- Coastal Pines Technical College will not be responsible if, as a result of findings from a criminal background check, allied health students are not allowed at a clinical site or are not allowed to sit for the certification exam in their field or fail to secure employment.
- Coastal Pines Technical College will not be responsible if, as a result of findings from a drug screen, allied health students are not allowed at a clinical site or are not allowed to sit for the certification exam in their field or fail to secure employment.
- Any student who must take a prescription or over-the-counter medication that significantly alters his/her behavior or ability must notify the instructor and should not attend any clinical facility while under this medication.
- Any student suspected by the instructor or clinical personnel to be under the influence of alcohol or drugs while at a clinical facility may be requested to take a blood alcohol test or drug screen at the student's expense. The student will not be allowed to enter the clinical facility until favorable test results are available. A report indicating the use of alcohol or drugs/medications capable of altering behavior or ability may result in the student being permanently removed from the clinical facility, which may prevent completion of the program.

A student who desires to change from diploma status to degree status should consult his/her program advisor. The student must meet degree admissions requirements and complete the Major Change portion of the Student Information Change Form. Changes must be made prior to the effective term. Changing programs or award types may change HOPE/Pell eligibility. Students should always consult with the Financial Aid Office prior to this type of transfer.

Dual Majors

Coastal Pines Technical College students enrolled in a diploma program who desire to add an additional (dual) major may do so in a second diploma or technical certificate of credit program if all of the following criteria are met:

- the second program is in a related field
- regular admission status is achieved
- 50% or more of the primary diploma program has been completed
- program minimum grade point average (GPA) of 2.50
- The primary or secondary programs are not HOPE Career Grant eligible programs

Program Transfer

Students who want to transfer from one program to another within the college must follow these procedures:

- Receive career counseling from an advisor before transferring to another program.
- Complete the Change of Major Request located in Admissions.

Dual Enrollment — High School Students

Financial Aid for High School Students

Eligible high school students can apply to receive funding from Georgia Student Finance Commission by completing the GAFutures application for Dual Enrollment.

Dual Enrollment requirements can be found at www.GAfutures.org.

For more information, contact a CPTC High School Coordinator or contact a high school counselor.

Secondary School Articulation Credit

Articulated credit may be awarded for coursework completed under articulation agreements when established competencies have been achieved. Credits earned in specific secondary school courses are eligible to be articulated for high school graduates as referenced by Technical College System of Georgia policy.

The following guidelines apply to CPTC articulated credit for high school graduates:

- An official high school transcript must be on file.
- Students must enroll within two years of graduation.
- A minimum grade of 70 must be earned in comparable secondary technical courses.
- For each course to be articulated, a student must pass the respective Competency exam.
- No fee shall be charged for validation of articulated credit.
- Articulated credit must be defined in state agreements.

Financial Aid Information

Financial Aid Procedures

It is recommended that anyone desiring financial aid apply six to eight weeks prior to the time the aid will be needed. Applications and information, including assistance in completion of forms, are available in the Financial Aid Office on the Waycross, Jesup, Golden Isles or Baxley campus and by appointment at all locations. The Financial Aid Office phone numbers for the following locations are: Waycross (912) 287-6584; Jesup (912) 427-5800; Baxley (912) 367-1700; Alma (912) 632-0951; Hazlehurst (912) 379-0041, Golden Isles (912) 262-4999; Camden (912) 522-4510.

Coastal Pines has several types of financial assistance to help qualifying applicants pay for their education. Funds are available through Federal and State aid as well as other scholarship and grant programs. Grant and scholarship programs operate on an award year basis beginning July 1 and ending June 30. Students must apply or re-apply each year in order to receive or continue receiving financial aid.

Basic eligibility requirements include but are not limited to the following:

- be enrolled as a regular or provisional student in an eligible certificate, diploma, or associate degree program
- be a U.S. citizen or eligible non-citizen
- have earned a high school diploma or equivalent
- be registered with Selective Service, if required
- not be in default on a Federal Title IV or State of Georgia educational loan or owe a refund due to over-award on a previously received grant
- agree to use any funds received only for educationally related purposes
- maintain satisfactory academic progress in accordance with Coastal Pines Technical College procedure
- certify that they will not engage in the unlawful manufacture, distribution, possession, or use of a controlled substance while receiving financial aid
- must not be recently convicted on felony drug related charges
- meet other program requirements

Eligibility Requirements

Basic eligibility requirements may include but are not limited to the following:

- be enrolled as a regular or provisional student in an eligible certificate, diploma, or associate degree program
- be a U.S. citizen or eligible non-citizen
- have earned a high school diploma or equivalent, or demonstrated the ability to benefit from the course of study
- be registered with Selective Service, if required
- not be in default on a Federal Title IV or State of GA educational loan or owe a refund due to an over-award on any previously received grant
- agree to use any funds received only for educationally related purposes
- maintain satisfactory academic progress in accordance with Coastal Pines Technical College procedure
- certify that they will not engage in the unlawful manufacture, distribution, possession, or use of a controlled substance while receiving financial aid
- must not be recently convicted on felony drug related charges
- meet other program requirements

Application Procedures for Pell Eligible Programs

Students who will be enrolled in a Federal Pell eligible program must complete the [Free Application for Federal Student Aid \(FAFSA\)](#). All students must use their legal name as it appears on their social security card. Using anything other than their legal name will result in major delays during processing. **Coastal Pines Technical College's Title IV Institution Code is 005511.** Students can electronically access FAFSA on the Web at www.studentaid.gov or complete either the paper application (requests for paper application must be made by calling (800) 4-FEDAID) and mail the paper application in the envelope provided to the Department of Education for processing. Either of these methods will allow the Financial Aid Office to receive your application information electronically. Other Coastal Pines Technical College forms need to be completed and returned to the Financial Aid Office.

If the FAFSA application is mailed, the student can expect to receive a Student Aid Report (SAR) from the processing center in four to six weeks. All pages of the SAR must be submitted to the Financial Aid Office.

If the FAFSA application is processed on-line, the student must either mail their signed signature page to the address provided or electronically sign the application as instructed. The Central Processing System will then determine eligibility for financial aid within 72 hours. A SAR will be mailed to the student.

If a FAFSA has been submitted and processed, there is no need to submit a separate application for the HOPE Grant or Scholarship. This is due to the Federal and State processing centers sharing information. Determination of eligibility will be made once all required forms and documents are received and processed.

Please check BannerWeb account weekly in order to check the status of your application process.

Application Procedure for Non-Pell Eligible Programs

Students who will be enrolled in a non-Pell eligible program must complete either a FAFSA or the HOPE Application. This form, as well as any other forms, must be completed, submitted, and processed before the determination of any eligibility can be made by the Financial Aid Office. If a student's schedule or major changes after registration, the financial aid award is subject to change.

Federal Pell Grant Program

The Federal Pell Grant Program — studentaid.gov - is a federally funded award to help persons who have not earned a bachelor's degree pay for their education after high school. The amount a student receives will depend on the EFC (Expected Family Contribution) shown on the SAR (Student Aid Report) or ISIR (Institutional Student Information Record), how many registered course credit hours, the cost of attendance, program eligibility and the size of the federal appropriations. Lifetime Pell eligibility is limited 600% or 18 semesters.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grant (SEOG) - studentaid.gov - is a federal program that provides assistance for students with exceptional need. The need is determined by the EFC (Expected Family Contribution) shown on the SAR or ISIR. Awards range from \$400 to \$1000 per term. Priority is given to students who have maximum eligibility and have a higher cumulative grade point average. Students must not be receiving assistance from any other service or form of Financial Aid other than the Federal Pell Grant and HOPE to get FSEOG. Students must be receiving a Federal Pell Grant to be considered.

Federal Work Study (FWS)

The Federal Work-Study Program — studentaid.gov - is a federal program that provides jobs for students with financial need, allowing them to earn money to help pay educational expenses. Students must be enrolled in a Title IV eligible program to be eligible.

1. Once registered for class(es), interested students should come by the Financial Aid Office to complete an application and notify Financial Aid they are interested in Work-Study.
2. The Financial Aid Office calculates the student applicant's need according to the Federal regulations to determine eligibility for Federal Work-Study and forwards eligibility to Career Services.
3. The Career Services Office instructs eligible students to apply on the College's website and forwards eligible student's applications to hiring department.
4. Work-Study candidates will be contacted for an interview by the department hiring.
5. Departments will select those to be employed and notify the Career Services Office.
6. The Career Services Office will submit a completed background check form to Human Resources for processing. Work Study contract information will be submitted to the departmental payroll person upon clearance and approval of the background check.
7. The newly hired student will complete all required payroll paperwork and return it to the departmental payroll person.
8. Student employees will be assigned an employee ID number to clock in and out on either a biometric clock or Coastal Pines Technical College's web-based time card system. At the end of each work-week, student employees will need to verify their time on the web-based time card system. Their weekly time will then be verified by their direct supervisor and the director of the assigned department.
9. The Career Services Office receives hours worked and salary information on student employees on a monthly basis.

Georgia HERO Scholarship (Helping Educate Reservists and their Offspring)

Georgia HERO program was created to provide educational grant assistance to members of the Georgia National Guard and U.S. Military Reservists who served in combat zones or the children of such members of the Georgia National Guard and U.S. Military Reserves. Recipients may receive up to \$2,000 per academic year. For eligibility criteria and official program regulations, please visit www.GAfutures.org.

Georgia College Completion Grant Program

The Georgia College Completion Grant program— <https://www.GAfutures.org> - is a state grant for Georgia residents up to a maximum lifetime limit of \$2500 that can be awarded one or multiple terms. The grant can be

applied toward a current term outstanding tuition and fee balance for students who have completed at least 80% of their program of study and meet the other general eligibility requirements. In order to be considered a student must complete the current year's Free Application for Federal Student Aid (FAFSA), complete any FAFSA verification requirements, and complete a CPTC Foundation Scholarship Application for each term they wish to be considered. The CPTC Foundation Scholarship Committee will review all eligible applicants. Awards will then be made according to the established criteria.

Zell Miller Scholarship

The Zell Miller Scholarship - The [Zell Miller program](#) is a state-funded award that will pay 100% of the standard tuition rate for eligible students seeking an associate degree. Students must have a Georgia High School GPA of 3.7, as determined by O.C.G.A 20-2-157, and receive a score of at least 1200 combined critical reading score and math score on a single administration of the SAT or an ACT composite scale score of at least 26, or graduated as a valedictorian or salutatorian from an eligible high school. Students must have a 3.3 GPA at all checkpoints (30, 60, 90, 3-term, and End of Spring). Students who lose eligibility at a checkpoint may regain eligibility once. Students who lose eligibility for Zell Miller Scholarship but still have at least a 3.00 GPA at a 60 or 90 checkpoint may continue to receive the HOPE Scholarship.

Zell Miller Grant

The Zell Miller Grant – <http://www.GAfutures.org> – is a state funded award that will pay 100% of the approved standard tuition rate for eligible students seeking a diploma or technical certificate of credit. Students must have a Cumulative HOPE Grant GPA of 3.5. A student must be eligible for HOPE Grant. Students may receive 63 semester credits combined HOPE Grant and Zell Miller Grant Paid Hours.

HOPE Career Grant (formerly Strategic Industries Workforce Development Grant (SIWDG))

The HOPE Career Grant is a state-funded award for students enrolled in select majors specifically aligned with industries in which there are more jobs available in Georgia than there are skilled workers to fill them. These industries have been identified as strategically important to the state's economic growth.

A student who meets all eligibility requirements for the HOPE Grant and is receiving a HOPE Grant award for a term is also eligible for a HOPE Career Grant award for that term. The two grants together will cover all tuition in eligible programs. Students will still be responsible for student fees and any equipment necessary, although in some cases, Financial aid is available.

High school students participating in dual credit enrollment are eligible for the HOPE Career Grant award. HOPE Career Grant awards are based on the student's program of study and the number of hours enrolled. A list of HOPE Career Grant programs can be found at the following link:

[HOPE Career Grant Programs](#)

Basic Eligibility

All eligibility requirements for the HOPE Grant and Zell Miller Grant apply to the HOPE Career Grant, formerly known as the Strategic Industries Workforce Development Grant.

1. Meet HOPE's U.S. citizenship or eligible non-citizen requirements;
2. Be a legal resident of Georgia;
3. Meet enrollment requirements;
4. Be in compliance with Selective Service registration requirements;
5. Meet academic achievement standards;
6. Be in good standing on all student loans or other financial aid programs;
7. Be in compliance with the Georgia Drug-Free Postsecondary Education Act of 1990;
8. Not have exceeded the maximum award limits for any HOPE or Zell Miller programs;
9. Must be eligible for, and receiving, HOPE or Zell Miller Grant funding.

Program Eligibility

Full-time enrollment in a certificate or diploma program is not required and students are not required to graduate from high school with a specific GPA, however, they must have a postsecondary cumulative 2.0 GPA, at certain checkpoints, in order to maintain eligibility.

Note:

A student who received a high school diploma (High School Postsecondary Graduation Opportunity Plan) by earning a technical college diploma or two technical college certificates, in one career pathway identified by the Technical College System of Georgia (TCSG), may be eligible for the HOPE Grant, up to 30-degree hours. The student must be enrolled in an associate degree program at a TCSG institution in order to receive the HOPE Grant. After payment for 30 semester hours, the student is no longer eligible for HOPE Grant while enrolled in a degree-level program. The student must then meet the HOPE Scholarship eligibility requirements at the 30 semester hour checkpoint.

[Eligibility Guidelines for the HOPE Grant](#)

HOPE Grant (Helping Outstanding Pupils Educationally)

The HOPE Grant - <http://www.GAfutures.org> - is a state funded award which will pay a percentage of tuition based on a factor rate set by the Georgia Legislature each year for all eligible students enrolled in diploma and technical certificate of credit programs. Continuing Education courses are not covered by the HOPE Grant. Georgia residency documents are required as proof to be considered for eligibility of this grant. There are two eligibility checkpoints: first when a student reaches 30 semester hours and second after 60 semester hours, based on HOPE Grant Paid Hours. To continue receiving HOPE, a student must have a 2.0 HOPE GPA at the 30th hour. Students who lose eligibility at the 30th hour can regain eligibility once at the 60th hour with a 2.0 GPA. Learning support coursework and dual enrollment coursework are excluded from the HOPE GPA calculation and checkpoints. HOPE Paid Hours prior to the implementation of the HOPE cap (prior to July 2003) do not count in HOPE Grant GPA or checkpoint calculations. Students with baccalaureate degrees cannot receive HOPE. HOPE Grant awards are limited to paying for a total of 63 semester credit hours beginning with courses taken in July 2003.

HOPE Scholarship (Helping Outstanding Pupils Educationally)

The HOPE Scholarship - <http://www.GAfutures.org> - is a state funded award that will pay a percentage of tuition based on a factor rate set by the Georgia Legislature each year for all eligible students seeking an associate degree. Georgia residency documents are required as proof to be considered for eligibility of this grant. To be eligible as a first-year student, a student must be a 1993 or later graduate of an eligible high school and earn a "B" average as determined by Georgia Student Finance Commission. A "B" average is a 3.00 cumulative grade point average on a 4.00 scale. If ineligible as a first-year student, a student may gain eligibility by maintaining a 3.00 HOPE scholarship cumulative grade point average after the school term in which 30 or 60 transferable semester hours of degree credit has been attempted. A student must not have exceeded his or her expiration of eligibility limits as describe by Georgia Student Finance Commission HOPE Scholarship Regulations found on the [GAfutures.org](http://www.GAfutures.org) website. Student may log into his or her GAfutures account to check their expiration date.

A student must not have already earned a baccalaureate degree or have attempted more than 127 semester hours of college credit.

Students must maintain a HOPE scholarship cumulative grade point average of 3.0 or better at the end of spring term (unless they are a less-than-full-time student who has taken less than 30 credits) and in the terms in which they have attempted 30, 60, and 90 credit hours. Failure to meet the cumulative GPA requirements at these check points will result in the loss of the HOPE Scholarship. A HOPE Scholarship recipient who has lost HOPE Scholarship Eligibility at two Checkpoints since Fall term 2011 cannot regain Eligibility. A student must have been receiving HOPE to be considered as having lost HOPE. More detailed information on eligibility and how a HOPE scholarship cumulative grade point average is calculated may be obtained from the Financial Aid Office.

Scholarship Opportunities



**COASTAL PINES
TECHNICAL COLLEGE**

FOUNDATION

The priority of the Coastal Pines Technical College (CPTC) Foundation is scholarship opportunities for students. Since its inception, CPTC Foundation has awarded hundreds of thousands of dollars in scholarships to assist students in pursuit of higher education. CPTC graduates contribute to a pool of highly qualified workers that attract new industry and sustain existing workforce needs. Upon employment, CPTC graduates strengthen the economy of Southeast Georgia in that most live and work near their alma mater. For this reason, students and student success are and will remain a priority for the CPTC Foundation. For more information about the CPTC Foundation and the Board of Trustees – please visit our [CPTC Foundation website](#).

The CPTC Foundation Board of Trustees raise funds through various ways including fundraisers such as the Annual John P. Pike Golf Tournament and the Annual Sporting Clays Tournaments. We have tremendous support from our community partners in our service area who donate to the CPTC Foundation. Many people and businesses set up scholarships and endowments in honor and memory of loved ones in our area by donating money to the Foundation to help students as well. We also have wonderful support from the CPTC staff who donate through an internal campaign to help our students.

The CPTC Foundation offers over thirty different scholarship opportunities for registered students. The scholarship application eligibility deadlines are announced prior to the upcoming semesters but generally are available for the prior 5 weeks or so before the semester begins. Please check your college email, college website, and college social media for published dates.

- To apply for a scholarship, please go to: [Apply for a Scholarship | Coastal Pines Technical College](#) (student must use their college login and password in order to apply)
- The student must be accepted to the College and registered for classes for the upcoming semester to apply for a CPTC Foundation scholarship.
- All students MUST apply for FAFSA [FAFSA® Application | Federal Student Aid](#) even if they do not feel that they may not receive Federal funding to be considered for a CPTC Foundation Scholarship.

Please contact Stephanie Roberts, Executive Director of College Advancement, at sroberts@coastalpines.edu if you have any questions.

Private (Alternative) Educational Loans

Sallie Mae - <http://www.salliemae.com> - is a private loan and should be used as a last resort to pay for tuition and fees only. Applicants must complete a FAFSA application and submit any necessary verification documentation if selected for verification. This will ensure that the student has been awarded all applicable Federal and State Aid before applying for a Private Student Educational Loan. CPTC will only certify a private educational loan for up to the amount of tuition and fees.

Please remember that private student loans have much more in common with credit card debt than Federal Student Loans and should be handled responsibly. They are NOT guaranteed by the Federal Government and have different requirements and regulations.

Tuition Payment Plan (NelNet)

Tuition payment plans break down the student tuition and fees balance into monthly payments.

There is no interest, payment options are flexible, setup fees are affordable, and it's easy to enroll.

Payment Methods

Payments are processed on the 5th of each month and will continue until the balance is paid in full. If a credit/debit card is used, a convenience fee in addition to the enrollment fee will be assessed.

Cost to Participate

- \$40 non-refundable enrollment fee per semester (Fall, Spring, and Summer) to participate, depending on the enrollment date (ACH & credit/debit card)
- \$2 enrollment fee for immediate full payment (Note: Full payments can be made directly to CPTC through BannerWeb at no additional charge.)
- \$30 returned payment fee if a payment is returned.
- A convenience fee of 2.75% will be added to every payment if a credit/debit card is used.

Steps to Enroll

- Determine total tuition and fees assessed and the approximate amount of bookstore credit needed for course materials.
- Go to www.coastalpines.edu.
- Under the MYCPTC tab click on BannerWeb and log in
- Select the BannerWeb Application
- Under the Financial Aid and Student Records tab click on the Student Records link
- Click Nelnet Payment Plan Login

Veterans Assistance

Credit programs at Coastal Pines Technical College are approved for Veterans Affairs Educational Benefits. Students eligible for Veterans Affairs Educational Benefits should contact the Financial Aid Office. Application forms and assistance in filing for education benefits are available online at www.va.gov.

- Veterans must attend scheduled classes and continue to show satisfactory progress. Benefit payments will not be made for courses from which the student does not continue to attend.
- Receiving Veterans Affairs Education Benefits does not prevent a student from applying or receiving other forms of financial aid

Students utilizing Chapter 31 (Vocational Rehabilitation and Employment) and Chapter 33 (Post-9/11 GI Bill®):

1. Veterans using Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 GI Bill® benefits can attend Coastal Pines Technical College (CPTC) for a term provided the student submits a certificate of eligibility for entitlement to educational assistance under Chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for Chapter 31 authorization purposes) and ending on the earlier of the following dates:

- a. The date on which payment from VA is made to CPTC;
- b. 90 days after the date CPTC certifies tuition and fees following the receipt of the certificate of eligibility.

2. CPTC will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, and will not require eligible veteran students to borrow additional funds because of the individual's inability to meet his or her financial obligations to CPTC due to the delayed disbursement funding from VA under Chapter 31 or 33.

3. Coastal Pines Technical College requires the following information in order to process Veterans Benefits under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 GI Bill®:

a. Submit a certificate of eligibility for entitlement to educational assistance no later than the first day of the term for which benefits are being requested.

b. Submit a written request to the CPTC School Certifying Official (SCO) to use such entitlement.

c. Provide additional information necessary for proper certification of enrollment by the CPTC School Certifying Official (SCO).

4. Students are required to pay any balance due for the amount that is the difference between the amount of the student's financial obligation and the amount of the VA education benefit disbursement by the established payment deadline for the term. Balances not paid by the stated deadline may be imposed additional fees.

Books and supplies for individuals covered under Chapter 33 are out-of-pocket expenses. The covered student will receive a stipend from the VA and this may or may not arrive before the first of the semester. Other forms of financial aid may be used in the bookstore at the beginning of the term.

Students covered under Chapter 31 will be allowed to purchase books and supplies per the terms of their contract.

For specific questions regarding individual eligibility, call the VA Atlanta Regional Processing Office at 1-800-827-1000 or visit <http://www.gibill.va.gov>.

Other Financial Aid Options

WIOA: The Workforce Innovation and Opportunity Act - the purpose of this act is to prepare economically disadvantaged youth and unskilled adults, or persons facing serious barriers to employment, with the training necessary for entry into the labor force. Contact the Financial Aid Office for more information, or click on the links below:

- Appling, Jeff Davis, and Wayne - [WorkSource Heart of Georgia \(HOG\)](#)
- Bacon, Brantley, Clinch, Charlton, Pierce, and Ware - [WorkSource Southern](#)
- Camden, Glynn, Long, and McIntosh - [WorkSource Coastal](#)

Division of Rehabilitation Services: Assistance is available for qualifying handicapped students. Students should contact their local office of the Department of Human Resources, Division of Rehabilitation Services for details.

General Aid: Various civic, social, professional and other organizations provide scholarships for deserving students. In most cases, financial aid is awarded based upon academic performance, financial need and availability of funds. Contact the Financial Aid Office for more information.

HomeFinancial Aid

FEDERAL APPLICATION FOR FEDERAL STUDENT AID (FAFSA) | The U.S. Department of Education's office of Federal Student Aid provides more than \$150 billion in grants, loans, and work-study funds for college or career school each year. It all begins with completing FAFSA - Federal Application for Federal Student Aid. Please remember that FAFSA must be completed **each year** after submitting income tax returns in order to continue receiving financial aid. [Click here for your FSA ID](#).

GAFUTURES | Helping Students, Plan, Apply and Pay for College An online resource system to help students and their families select a college, apply for Admissions, and plan to finance higher education provided by the Georgia Student Finance Commission.

NSLDS – STUDENT ACCESS | The National Student Loan Data System (NSLDS) is the U.S. Department of Education's (ED's) central database for student aid. NSLDS Student Access provides a centralized, integrated view of Title IV loans and grants so that recipients of Title IV Aid can access and inquire about their Title IV loans and/or grant data.

SELECTIVE SERVICE SYSTEM | Link provides access for males to register or verify their registration status. Males born on 01/01/1960 and after must be registered with the Selective Service in order to be eligible for Federal and State Financial Aid (this includes Scholarships, Grants, and Student Loans).

SOCIAL SECURITY ADMINISTRATION | Application for a Replacement Social Security Card

DEPARTMENT OF VETERAN AFFAIRS EDUCATION BENEFITS | Coastal Pines Technical College is approved for veteran's training under various programs. Check with the Office of Financial Aid prior to enrolling in a course to assure that a particular course meets current approval for VA Benefits.

FASTWEB | FastWeb is the largest and most complete scholarship search on the Internet. It provides access to a searchable database of more than 400,000 private sector scholarships, fellowships, and grants available to students.

SCHOLARSHIP.COM | Scholarships.com offers free scholarship and college search, reliable information about scholarships, grants & other free money, along with hundreds of pages of other helpful contact, addressing all aspects of the financial aid process and college life.

FINAID! - THE SMARTSTUDENT GUIDE TO FINANCIAL AID | FinAid is the most comprehensive source of student financial aid information, advice and tools -- on or off the web.

GO BUILD GEORGIA HIGH DEMAND CAREER SCHOLARSHIPS | Go Build Georgia High Demand Career Scholarships will be awarded to graduating high school seniors entering a TCSG institution in a field of study leading to a high demand career in the skilled trades.

1098T FAQ | For more information on the 1098T form and how to get your student tuition payment statement, please follow the hyperlink.

FA Bachelor-Graduate Degree Form

Dependent Student Household Members Verification Worksheet

Dependent Student Tax and Income Verification Worksheet

Federal Workstudy Application Request

Financial Aid Income Adjustment Request Form

Independent Student Household Members Verification Worksheet

Independent Student Tax and Income Verification Worksheet

Financial Aid IRS Non-Filing Tax Form

Private Educational Loan Entrance Counseling Form

Private Educational Loan Exit Counseling Form

Satisfactory Academic Progress Appeal Form

Unusual Enrollment History Verification Form

Financial Aid Responsibility Statement

Financial Aid Veterans Student Responsibility Form

HOPE Scholarship Evaluation Request Form

Financial Aid Award Packet

Identity Verification and Statement of Educational Purpose

Educational Benefits

Former service personnel, current military service members, and their dependents may be eligible for education benefits provided by Veterans Affairs. Coastal Pines Technical College has staff available in the Financial Aid Office to help you understand the process of receiving the benefits you've earned. For specific information about your GI Bill® education benefits, visit www.benefits.va.gov/benefits or call 1-888-GI-Bill® their number is (1-888-442-4551).

GI Bill® is a registered trademark of the U.S. Department of Veteran Affairs. More information about education benefits offered by VA is available at the official U.S. government website at <http://www.benefits.va.gov/gibill>.

Chapter 33 Post 9/11®
Chapter 30 Montgomery GI Bill® – Active Duty (MGIB-AD)
Chapter 1606 Montgomery GI Bill® – Selected Reserve (MGIB-SR)
Chapter 1607 Reserve Educational Assistance Program (REAP)
Chapter 35 Survivor's and Dependent's Educational Assistance (DE

Apply

If this is your initial claim for educational benefits, you will need to complete an Application for Benefits (VA form 22-1990/VA Form 22-5490 for Chapter 35). The Department of Veteran Affairs has provided veterans and current military service members an online version of the application through **eBenefits**.

Visit www.ebenefits.va.gov to register for a premium account and apply for your educational benefits. The website gives you the opportunity to track your eligibility for any benefits received from VA.

You are also able to print the Application for Benefits (VA form 22-1990/VA Form 22-5490 for Chapter 35) through www.benefits.va.gov/benefits or visit a local Georgia Department of Veterans Service for assistance with completing the VA form 22-1990/VA form 22-5490.

Once you have been approved by the VA Processing Center, you will receive a Certificate of Eligibility (COE). Please submit a copy of the COE to our office. We will use the certificate to certify your enrollment, so you can begin receiving your benefits.

Change of Program/Place of Training

If you are changing your program major, you will need to complete a Request for Change of Program or Change of Place of Training form (VA Form 22-1995/VA Form 22-5495 for Chapter 35).

If you have already been approved for VA educational benefits and decide to transfer the benefits to our institution, you will need to complete a **Request for Change of Program or Change of Place of Training** form (VA Form 22-1995/VA Form 22-5495 for Chapter 35).

To obtain a copy of the **Request for Change of Program or Change of Place of Training** form visit www.benefits.va.gov/benefits to download the form. Once you have completed the form, drop it by the Financial Aid Office at CPTC.

Certification of Enrollment

Once our office has determined your eligibility for education benefits, our School Certifying Official (SCO) will verify your enrollment at Coastal Pines Technical College and submit a certification to the VA Regional Office.

Laura Walker	Tina Manning
Financial Aid Technician	Financial Aid Director
Primary VA School Certifying Official	VA School Certifying Official
Phone: 912-338-5252	Phone: 912-427-5814
lwalker@coastalpines.edu	tmanning@coastalpines.edu

Enrollment Status Changes and Withdrawals

It is your responsibility, as a student, to notify CPTC School Certifying Official immediately of any changes in your enrollment status, program of study, place of training, etc. These changes may impact your eligibility for VA benefits.

Resources

Department of Veterans Affairs	www.benefits.va.gov/benefits
Monthly Enrollment Verification of Attendance	877-823-2378
(WAVE)	www.gibill.va.gov/wave/index.do
Veterans Crisis Line	Phone: 800-273-8255 x1 Text: 838255 Web: http://veteranscrisisline.net
Available 24 hours a day, 7 days a week	
National Call Center for Homeless Veterans	877-4AID-VET Macy Evans Student Success Coach 912-285-6361 (office) 912-424-3645 (cell)
Disability Services	
Registrar's Office	912-427-5817
Free Application for Federal Student Aid (FAFSA)	www.fafsa.gov School Code: 005511

Learn More

We're here to help, and it's easy to get started. Call, email, or stop by the Financial Aid Office with any questions or needs you may have.

Contact the CPTC Financial Aid Office at (912) 338-5252, (912) 427-5814, or finaid@coastalpines.edu. Visit the Financial Aid Office at your local site.

[News Article: Coastal Pines Technical College named Military Friendly School](#)

Withdrawals and Title IV Aid

Return to Title IV Funds Policy

The Higher Education Amendments of 1998 changed the formula for calculating the amount of aid a student and school can retain when the student totally withdraws from all classes. Students who withdraw from all classes prior to completing more than 60% of an enrollment term will have their eligibility for aid recalculated based on the percent of the term completed. For example, a student who withdraws completing only 30% of the term will have "earned" only 30% of any Title IV aid received. The remaining 70% must be returned by the school and/or the student. The Office of Financial Aid encourages you to read this policy carefully. If you are thinking about withdrawing from all classes PRIOR to completing 60% of the semester, you should contact the Office of Financial Aid to see how your withdrawal will affect your financial aid.

1. This policy shall apply to all students who withdraw or drop out from Coastal Pines Technical College, and receive financial aid from Title IV funds:
 - The term "Title IV Funds" refers to the Federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes Federal Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG).
 - A student's withdrawal date is the student's last date of attendance as reported by their instructor or the last date of documented academically related activity.
2. The percentage of Title IV aid earned shall be calculated as follows:
 - Number of days completed by student/Total number of days in term*
 - The percent of term completed shall be the percentage of Title IV aid earned by the student.
 - Students are responsible for any portion of their institutional charges that are left outstanding after Title IV funds are returned.
 - The total number of calendar days in a term of enrollment shall exclude any scheduled breaks of more than five days.

Satisfactory Academic Progress (SAP)

Every student shall be made aware of the specific institutional requirements of Coastal Pines Technical College (CPTC), a unit of the Technical College System of Georgia, for achieving and maintaining satisfactory academic progress (SAP).

CPTC has developed a local Satisfactory Academic Progress Procedure that is consistent with Title IV of the Higher Education Act.

Federal and state regulations require students meet minimum academic requirements to remain eligible for financial aid each semester. In order to maintain financial aid eligibility at CPTC, students must meet minimum cumulative Grade Point Average (GPA) requirements as well as successfully complete, within a maximum timeframe, all coursework required for completion of the chosen program of study. CPTC requires that all financial aid recipients earn a cumulative GPA of 2.0 and successfully complete, with a grade of "C" or better, at least two-thirds of 66.67% of all credit hours attempted.

Satisfactory Academic Progress is evaluated after grades are issued each semester. Grades of "A", "B", "C", "Z" and "S" are considered successfully completed while grades of "D", "F", and "WF" will negatively affect the grade point average. Grades of "U", "W", "WP", "WF", "D", and "F" are not considered satisfactory grades and are included in the total credit hours attempted. Grades of "I", "TR", "IP", "EX", "AU", repeated courses, and Learning Support courses are included in the total hours attempted and applied towards the maximum timeframe when computing Satisfactory Academic Progress. Learning Support grades are not included in the GPA calculation for financial aid purposes.

Transfer credits from other schools accepted by CPTC will be counted toward completion as both hours attempted and hours successfully completed. A transfer student is considered to be making satisfactory academic progress during the first semester of enrollment at the institution. After the first semester, the student will be responsible for meeting all Satisfactory Academic Progress requirements.

Students are expected to know and understand the SAP procedure. The Financial Aid Office will notify students of their status via their student e-mail address. Students that do not receive notification because they did not check their student e-mail are not excused from financial aid probation (suspension) nor are exempt from appealing in a timely manner. Students may log into BANNER Web at any time to check their academic status.

Maximum Time Frame (150% Standard):

Students must complete their program of study within 1.5 (150%) times the normal length of a program of study. This includes all credit hours attempted whether they are completed or passed that are a part of the current program of study. For example, if a program of study is 80 credit hours, the maximum timeframe to complete the program and receive financial aid is 120 attempted credit hours. Courses that are not part of the current program will not count as attempted. The maximum timeframe will vary depending upon the length of the program of study. Students required to enroll in Learning Support courses may receive federal aid for up to a maximum of 30 attempted semester credits of Learning Support courses.

Financial Aid Warning:

Students who fail to meet the minimum cumulative GPA or fail to complete a cumulative minimum of 66.67% of attempted credits at the end of a semester will automatically be placed on financial aid warning for the subsequent semester of enrollment. During the warning period, students remain eligible for financial aid and must improve their academic standing in order to meet the minimum requirements. An appeal is not required for this status. Students will be notified in writing when they are placed on warning status.

Financial Aid Suspension:

Failure to meet the minimum GPA or course completion requirements by the end of the financial aid warning period will result in the suspension of financial aid eligibility. Students placed on financial aid suspension will not be eligible for financial aid until the cumulative GPA of 2.0 is met and a minimum of 66.67% of attempted credits have been successfully completed. Students will be notified in writing when aid eligibility has been suspended. Students have the right to appeal the suspension and request reinstatement of eligibility.

Appeal of Financial Aid Suspension:

Within five (5) calendar days after notification, students for whom financial aid eligibility has been suspended have the right to petition the Financial Aid Appeals Committee for reinstatement of financial aid eligibility. Students must submit to the Financial Aid Office a completed/signed Appeal of Financial Aid Suspension form along with supportive documentation and include a letter of explanation describing the basis for the appeal (i.e., death of a relative, an injury or illness of the student, or other special circumstances). The letter should also include an explanation of what has changed that would allow the student to demonstrate satisfactory academic progress during the next semester of enrollment. The Financial Aid Appeals Committee will evaluate each appeal on a case-by-case basis.

Financial Aid Probation:

An appeal approved by the committee may require an academic plan which is a set of certain conditions that must be met in order for financial aid eligibility to be reinstated on a probationary basis for the subsequent semester of enrollment. Some academic plans may expand over the course of multiple terms but will be monitored on a term by term basis and may be terminated at any time that the conditions are not met. The Financial Aid Office will continue to monitor each recipient's academic progress to ensure that the conditions of the probationary status are successfully completed.

Students for whom an appeal for financial aid reinstatement is denied may continue enrollment at CPTC at their own expense.

Responsibility:

The Vice President for Student Affairs has the overall responsibility of ensuring this procedure is implemented.

Adopted: April 28, 2014

Revised: July 19, 2022

Registration

Coastal Pines Technical College's Academic Advisement division is responsible for advising new students once the initial application has been submitted and all required documents have been processed. Each academic advisor is responsible for several program areas. Students can make an appointment with the academic advisor. Please click on the following link to see who your academic advisor is for your program of study and to schedule your appointment. [Advisement appointment schedule](#).

Full-time faculty members are responsible for advising and registering students who are currently enrolled in Coastal Pines Technical College (CPTC) courses.

The Academic Affairs Dean for Secondary Initiatives and High School Coordinators/Recruiters are responsible for coordinating advising and registration of high school dually enrolled students for their individual high schools. All other new, current, and returning students are assigned to advisors based on the student's academic program. Advisors focus on assisting students in completing their required program curriculum in a timely manner and earning their academic awards.

1. Current Student Registration. Faculty/Advisors are responsible for advising and registering currently enrolled students prior to the end of each academic term. The academic calendar shows the starting days of registration for currently enrolled students.
2. New Student Registration. Academic Advisors will advise and register new students in accordance with the academic calendar.
3. Late Registration. Late Registration is the first five days of the term. Students who have completed the Admissions process may be registered into classes on a space-available basis. These students should contact their Advisor for assistance.
4. Payment of tuition and fees confirms registration and reserves the student's schedule.
 - All tuition and fees are due before the first day of the term for ALL credit students. This requirement holds true even if the class is scheduled to begin on a different day.

CPTC students desiring to take a course or courses from another accredited institution must have prior approval from the CPTC registrar's Office and be in good standing. It is the student's responsibility to apply to the institution he or she wishes to attend as a transient student and have a transcript sent to CPTC at the end of the semester in order for the grade to be issued as a transfer grade. Only grades of "C" or better are accepted as transfer grades.

If the transient status is not approved, courses will NOT be eligible for transfer to a CPTC program of study.

A student must complete at least 25% of his or her credit hours of a particular program of study at Coastal Pines Technical College in order to be awarded a technical certificate of credit, diploma, or degree from Coastal Pines Technical College.

Transient Process:

Students will click on the link below to find the College that offers the course or courses they wish to take. The student will then contact the Registrar's Office to obtain a Transient Agreement to approve the student to take the course at another institution. Once this is approved the student will apply to the host institution as a Transient Student. The host institutions applications can be found on the following link: [Host Institutions applications link](#)

Georgia Virtual Technical College (GVTC)

GVTC Application process

Academic Load (Full-time Status)

Students must register for 12 or more credit hours to be considered full time.

Enrollment Verification

Coastal Pines Technical College has authorized the National Student Clearinghouse (NSC) to provide enrollment verification certifications for students through NSC Student Self Service. NSC Student Self Service enables CPTC students to print official enrollment verification certifications on demand via our secure student portal, BannerWeb, at no charge.

Matriculation

Enrollment for the term is not complete until the student has properly completed registration and paid all fees due.

Students receiving financial aid can check their detailed account information through Stingray Experience via the Student Self-Service card or by visiting the Financial Aid office to review the financial aid awards available to cover that semester's fees.

The deadline to pay fees is the first day of the semester, regardless of when classes begin.

Schedule Changes

The official drop period is the first five business days of the term. Courses dropped during this period will not appear on a student's academic record.

The official add period is the first five calendar days of the semester.

Course Withdrawal

Formal withdrawal is accomplished by completion and submission of a Course Withdrawal form. This form is available to students Stingray Experience website under the Students' Electronic Forms.

Students who withdraw from a course after the end of the fifth business day of the term shall receive a grade of 'W' and shall receive **no refund of tuition and fees**.

In order to receive a 100% refund, the student must notify their instructor, OR" a withdrawal form must be completed BY THE STUDENT and submitted to Student Affairs by closing time on the fifth business day of the term.

Distance Education

Online Classes

The purpose of distance education at Coastal Pines Technical College (CPTC) is to provide our students the opportunity to access quality instruction online. Distance education is defined as providing access to learning when students are not physically present in a traditional classroom setting. CPTC desires to create and provide access to learning when the source of information and the learners are separated by time and/or distance.

Distance Education Participation

Coastal Pines Technical College (CPTC) is committed to providing students the opportunity to access quality instruction online. Establishing a consistent and acceptable pattern of logging in and submitting work is considered an integral part of the total educational process. Employers who hire Technical College System of Georgia graduates consistently stress the importance of having a good punctuality record. Students are receiving an education for direct entry into the workforce. CPTC has the responsibility of attempting to instill in each student the importance of a good attendance and punctuality record. Because of this importance, an evaluation of participation is done in each course.

Students in distance education classes must complete an academic assignment within the first five (5) calendar days of the academic term. Students who fail to complete an academic assignment within five days will be considered a "No Show". Students enrolled in distance education classes should actively participate in class assignments as prescribed by the course syllabus and/or instructor. Students in Distance Education courses should follow the procedures for participation and withdrawal as outlined for all courses in the handbook.

Proctoring of Distance Education Credit Courses

In order to comply with accreditation requirements for the validation of student identity for all online courses, all students enrolled in online courses are required to have at least one proctored event (a major exam or assignment).

The Coastal Pines Technical College (CPTC) Office of Distance Education will provide exam proctoring services for students who are taking online courses during the examination period. Also, CPTC will proctor exams or other assignments for any student of any Technical College System of Georgia (TCSG) college during the examination period.

Students choosing to utilize an alternative proctoring solution are responsible for finding a qualified proctor to administer each event, and for submitting the required approval form for each event. Qualified proctors must meet with the requirements of Coastal Pines Technical College.

Students must complete the proctoring event no later than the date specified by the instructor in the course syllabus or provided by the instructor in a subsequent communication. Students who do not complete the proctored event as scheduled must comply with the specifications as explained in the course syllabus or participate in remote proctoring as arranged by the course instructor and the Office of Distance Education.

Proctoring Methods

On/Off Campus Proctoring

Proctoring for online course is provided within Blackboard utilizing Respondus Lockdown Browser. Respondus is a downloadable service that allows students to complete a proctored examination regardless of location. The minimum equipment requirements for online test proctoring are provided in the Blackboard course site.

Fee

CPTC does not charge a fee to proctor examinations to students. Also, Technical College System of Georgia (TCSG) colleges do not charge a proctoring fee to administer examinations to students of other TCSG colleges. However, students who choose to have an examination proctored outside of the TCSG system are responsible for any fees that could be incurred by the proctoring institution.

Transfer Credit

Transfer Credit Guidelines

Coastal Pines Technical College (CPTC) assumes responsibility for the academic quality of any academic credit recorded on its transcripts. It ensures all academic credit is at the collegiate level and is comparable to CPTC's credit programs.

Students who wish to have prior college credit evaluated for transfer or intend on using a funding source that requires the evaluation of prior college credit, such as the HOPE Scholarship or Veterans Educational Benefits, must submit all post-secondary transcripts along with their admission application.

All official transcripts submitted by applicants to the college are evaluated for credit transfer. Credit for courses at a college, university, or other postsecondary institution accredited by a national or regional accrediting agency recognized by the U.S. Department of Education and the Technical College System of Georgia and whose curriculum is equivalent to or greater than that of CPTC will be considered for award of transfer credit.

Students who have completed all or part of their secondary or postsecondary education outside of the United States are required to have their foreign educational credentials evaluated and approved by an independent evaluation agency.

Collegiate credit awarded by colleges, universities, or other postsecondary institutions not fully accredited nor in candidacy status for accreditation from a regional accrediting association will be considered for transfer credit following the verification of instructor credentials and approval by the Vice President for Academic Affairs or his/her designated authority.

CPTC will honor any academic sanctions imposed on applicants by the last postsecondary institution attended.

Awarding of transfer credit by CPTC does not guarantee that institutions subsequently attended by the student will accept the credit.

The following guidelines apply to the evaluation of transfer credit:

- Residence Requirements for Degree/Diploma requires a minimum of twenty-five percent (25%) of the course work of a particular program of study be completed at Coastal Pines Technical College for Coastal Pines to be able to grant the award.
- An official transcript is on file from all post-secondary institutions attended. Credits from one former institution appearing on the transcript of another institution can neither be evaluated nor accepted for credit without an official transcript from the institution of origin.
- A desktop review (evaluation of courses for transfer credit) is required.
- A grade of "C" or higher has been earned for each course transferred.
- Occupationally related technical coursework should have been completed within 7 years prior to enrollment at CPTC. Credit competency Exams are available for consideration of credit for technical courses that are more than 7 years old.
- No time limits exist on the transferability of general education coursework.
- The course is essentially the same in content as the course at CPTC.
- Maximum credit hours awarded for a transfer course will not exceed the credit hours assigned to an equivalent course at CPTC.
- Course descriptions, syllabi, and pertinent catalog information will be reviewed to assure course compatibility with those of CPTC. Students are responsible for obtaining appropriate course descriptions and additional documentation if needed.
- Decisions regarding the transfer of academic credit are made by the Registrar.

Designation of Transfer Credit

Coastal Pines Technical College uses the following designations for transfer credits:

- Transfer credit is recorded by the use of the letters "TRA", "TRB", and "TRC" on the transcript and does not require the payment of course fees. The credit is not included in the calculation of the student's grade point average except for consideration of program admission into competitive admission programs.
- Military training credit is recorded as "TRM" on the transcript and is not calculated in the grade point average.
- Articulation credit is recorded as "AC" (A, B, or C) on the transcript. This credit is not included in the calculation of the student's grade point average except for consideration of program admission into competitive admission programs.
- Exemption Credit is recorded as "EXE (Exam) or EXP (Portfolio)" on the transcript and is not included in the calculation of grade point average.

Secondary School Articulation Credit

Articulated credit may be awarded for coursework completed under articulation agreements when established competencies have been achieved. Credits earned in specific secondary school courses are eligible to be articulated for high school graduates as referenced by Technical College System of Georgia policy.

The following guidelines apply to CPTC articulated credit for high school graduates:

- An official high school transcript must be on file.
- Students must enroll within two years of graduation.
- A minimum grade of 70 must be earned in comparable secondary technical courses.
- For each course to be articulated, a student must pass the respective Competency exam.
- No fee shall be charged for validation of articulated credit.
- Articulated credit must be defined in state agreements.

Standardized Exam Credit

CPTC may award credit for a limited number of college level subject exams available through several nationally recognized examination boards. Credit may be awarded for approved Advanced Placement (AP) Examinations, College Level Examination Program (CLEP), and International Baccalaureate Credit pending review by the Registrar and appropriate faculty. Advanced Placement Examinations are offered by the College Entrance Exam Board. Exams administered for CLEP subject matter are awarded according to the American Council on Education's College Board. International Baccalaureate Credit examinations are offered by the International Baccalaureate Examination Board.

The following guidelines apply to College Board examination credit:

- Students must receive a score of 3 or higher on the Advanced Placement (AP) exam
- Students must score at the 50th percentile or above on the CLEP test
- Official test scores must be sent directly from the College Board to CPTC's Office of Admissions
- Students must receive a score of 3 or higher on the International Baccalaureate Examination
- Standardized exam credit is recorded as "EXE" on the transcript and is not included in the calculation of grade point average.

Courses where students have received exemptions, through articulation, or passed a CLEP exam are not eligible for competitive admissions points and cannot be used to calculate qualifying GPAs for program admission.

Military Training Credit

Credit may be awarded for training received in the Armed Forces. Students requesting credit should submit an official training certificate/transcript to the Admissions Office.

The following guidelines apply to military training credit for transfer:

- The training must be certified by the Guide to the Evaluation of Education Experiences in the Armed Forces published by the American Council on Education or by the official catalog of the Community College of the Air Force.
- Time limits for transfer will be the same as those for traditional transfer credit. Credit Competency Exams are available for consideration of credit for technical courses or experiences that are more than 7 years old.
- Training experience meets required competencies of courses offered at the College.
- Advanced standing credit may be awarded for military training or successful completion of a Credit Competency Exam. Training experience and Competency Exam scores must meet competency requirements for the equivalent CPTC course.
- Military training credit is recorded as "TRM" on the transcript and is not calculated in the grade point average

Prior Learning Assessment (PLA)

A student seeking credit for non-credit coursework, such as on the job learning, corporate training, experiential learning or professional or industry certification, may request a Credit Competency Exam or evaluation of work experiences. Student requests for the evaluation of licensure, certifications, and/or work experience for course credit are handled on a case by case basis. Documentation is required. Appropriate faculty members, Deans and the Registrar collaborate on an evaluation of the documentation portfolio. The process ensures all course work and outcomes are at the appropriate collegiate level. A grade of "EXP" is entered to indicate successful completion of the CPTC Credit Competency exam or approval of credentials evaluation and is not included in the calculation of grade point average.

Institutional Exemption Exam

For students with previous knowledge and skills acquired through experience or other means, credit may be obtained for certain specified courses by demonstrating mastery of the subject through written and/or performance exams. A student may receive course credit by passing an institutional exemption exam. The exam validates the competencies and skills the student would obtain through enrollment in the course.

The following conditions govern credit by exemption exam:

- Student may not be currently enrolled in the class for which exemption is attempted.
- An exemption exam may not be attempted during the same term for which the student withdrew from the course he/she is attempting to exempt.
- Credit by exam is prohibited for any course in which a grade of "D" or "F" has been earned by the student.
- An exemption exam can be taken only once.
- No more than 23 semester credit hours may be earned by institutional credit exam.
- Payment of the applicable exemption exam fee must be made prior to taking the exemption exam (25% of course tuition). Charges for the exam are nonrefundable and are not covered by financial aid.
- No fee shall be charged to students taking an exam to validate competency following completion of required modules in a learning support class.

Student Records

Academic records for students are maintained by the Registrar's office and include a transcript(s), graduation evaluations, transfer credit evaluations, and Coastal Pines Technical College academic records.

For the protection of student's rights to privacy, the Registrar's Office ensures the College's compliance with the provisions of the Family Educational Rights and Privacy Act of 1974 as amended (FERPA), the State Board of Technical and Adult Education, and regulations as established by the State Board of Georgia.

For more information about students' privacy rights, please review all sections in the Student Handbook under Student Records.

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act ("FERPA"), a Federal law, requires that TCSG and its technical colleges, with certain exceptions, obtain a student's written consent prior to the disclosure of personally identifiable information from that student's education records.

However, TCSG or its technical colleges may disclose appropriately designated "directory information" without written consent unless the student has advised TCSG or the technical college to the contrary. Public Directory information, which is information that is generally not considered harmful or an invasion of privacy if released, can also be disclosed to outside organizations without the student's prior written consent.

If a student does not want TCSG or the technical college to disclose directory information from his or her student education records without prior written consent, the student must notify TCSG or the technical college where he or she is enrolled, in writing, by the first day of the semester at the registrar's office at his or her technical college. A student need only file this notification once during his or her enrollment. However, if there is a break in enrollment or transfer to another TCSG technical college, a new notification must be filed.

Even if a student elects to prohibit the release of directory information, TCSG or the technical college may still implement policies requiring the student to wear or present a student ID badge.

See Directory Information for Coastal Pines Technical College's definition of "public directory information" and "non-public directory information".

Release of Educational Record Information

Policies relating to the establishment, utilization, availability, and retention of student records are in accordance with the provisions of the Family Education Rights and Privacy Act (FERPA) of 1974 as amended and the policies of Coastal Pines Technical College. With certain exceptions, a student has the right of access to his/her records which are maintained by an educational institution or by a party authorized to keep records for the institution. The U.S. Department of Education enforces the Family Education Rights and Privacy Act. This U.S. Department of Education receives and reviews complaints and forwards those that are not resolved to a review board that can recommend to the Department of Education Secretary sanctions including withdrawal of federal funds.

Notification of Student Rights to Records

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational record. These rights include:

- The right to inspect and review student's educational records. Students must submit a "Student Request to Inspect and Review Educational Record" form that specifies the record(s) they wish to inspect. This written request must be submitted to the Vice President for Student Affairs. The inspection will be within 45 days of the receipt of the student's written request.
- The right to request the amendment of the student's educational record that they believe is inaccurate. Students may ask Coastal Pines Technical College to amend a record that they believe is inaccurate. They

should write the Vice President for Student Affairs, clearly identify the part of the record they want changed and specify why it is inaccurate. If it is decided that the record will not be amended as requested by the student, CPTC will advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- The right to consent to disclosures of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by Coastal Pines Technical College to comply with the requirements of FERPA.

Contact information for the federal office that administers FERPA is as follows:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

Public and Non-Public Directory Information

The Federal Privacy Act stipulates that an institution has the right to declare one or more categories of information as public or directory information that may be released to the public at the discretion of the institution. Coastal Pines Technical College considers the following as directory information:

The Technical College System of Georgia and its technical colleges define "public directory information" as follows:

- Full name of the student
- Major and field(s) of study
- Enrollment Status (full-time, part-time, etc.)
- Degrees and awards and dates received
- Dates of attendance
- Participation in official sports and activities
- Height and weight of athletic team members

The Technical College System of Georgia and its technical colleges define "non-public directory information" as follows:

- Social Security Number
- User ID or other unique Personal Identifiable number
- Email address
- Telephone Number
- Non-public directory information is not available to the public but is available to any college official. If the student has indicated to restrict their data, then college officials can only access the information when it is needed for educational purposes.

Additionally, certain state and federal laws require the release of certain student information without prior notification to the student.

Contact the Registrar's Office for more information.

Solomon Amendment

A federal law known as the Solomon Amendment requires Coastal Pines Technical College to release student recruitment information to military recruiters. Student recruitment information is defined as name, address, telephone number, age, major, date(s) of attendance, and degree awarded.

FERPA/Solomon Amendment Objection

Any adult student or minor student's parent who objects to the release of this directory information under the Family and Educational Rights and Privacy Act should file an objection in writing clearly stating what directory information should not be released to third parties. Forms are available in the Registrar's Office for filing a FERPA Objection.

Disciplinary Records

Disciplinary records are considered confidential information to be released only to faculty and administration officers who have responsibility related to the educational mission of the Institution and/or its disciplinary process. Release of information from this record to employers and prospective employers will occur upon a written release from the student or graduate. Information will be released to law enforcement officials upon court order, upon written release from the student or graduate or when there is a reason to believe this information is pertinent to the investigation or prevention of a crime.

Bookstore

Books are sold to students who are registered to take courses scheduled at CPTC.

To purchase books through the CPTC Bookstore:

- The student must be registered for his/her class(es).
- The student must bring a printed class schedule and picture ID to bookstore to ensure proper textbooks/supplies are purchased.
- Bookstore purchases made before the first business day of the term are cash, check, or credit/debit card only.
- Beginning the first business day of the term, financial aid may be used for bookstore purchases.
- Payment must be made at the time of purchase unless financial aid is available for books. No cash will be refunded to students purchasing books through financial aid arrangements.
- Students have 10 days after the date of purchase to return unopened/undamaged books.
- The student will sign the invoice showing acceptance of books purchased using financial aid.
- Students are required to attend classes to qualify to have books purchased through financial aid arrangements.
- Students purchasing books using financial aid awards who subsequently drop courses will be responsible for charges if their financial aid award is reduced.

Refunds of Books and Supplies

No refunds shall be made for used supplies and equipment such as cosmetology kits, jump drives, tools, and clothing. Refunds shall be made for books that are returned in new condition and accompanied by a receipt in accordance with the CPTC's book refund procedure. The book refund procedure shall be prominently posted in the Coastal Pines Technical College bookstore. No refund shall be made for books issued to students participating in the Dual Enrollment program.

Tuition and Fees

Students attending Coastal Pines Technical College (CPTC) shall normally be charged tuition and related fees, unless otherwise exempted.

Tuition for courses in curriculum leading to a certificate, diploma, or associate degree shall be charged on a uniform basis.

Tuition Classification

Georgia Student Tuition

Students who are classified as Georgia Students under TCSG's residence policies and procedures will be charged the rate of tuition set for in-state students by TCSG.

Out-of-State Tuition

CPTC students who are classified as Out-of-State students under TCSG's residence policies and procedures will be charged a rate of tuition twice that charged for students who are classified as Georgia students.

The Commissioner of TCSG or President of CPTC may approve exceptions to this provision, provided:

- A written statement of reason is on file or there is evidence of a written reciprocity agreement with appropriate institutions in another state.
- The Commissioner may approve agency-wide exceptions to this policy under certain circumstances. (i.e., National Emergencies, etc.)

Under no circumstances shall Out-of-State students be charged tuition or fees lower than the fees charged to Georgia students.

All fees, other than tuition, shall be at the same rate for all students.

Out-of-state students shall be enrolled in the College on a space-available basis and shall not displace any Georgia student desiring to enroll at CPTC.

Non-Citizen Tuition

Non-Citizen Students shall not be classified as Georgia Students for tuition purposes unless lawfully present in this state and there is evidence to warrant consideration of that classification. They are to be charged a rate of tuition four times that charged for students who are classified as Georgia Students.

Lawful permanent residents, refugees, asylees, or other Eligible Non-Citizens as defined by federal regulations may be extended the same consideration as citizens of the United States in determining whether they qualify as Georgia Students.

Students who reside in the United States under nonimmigrant status conditioned at least in part upon intent not to abandon a foreign domicile are NOT eligible to qualify as Georgia Students for tuition purposes.

All fees, other than tuition, shall be at the same rate for all students.

Tuition Waivers and Exemptions

Waiver of Student Tuition and Fees

The Commissioner of TCSG grants the President of CPTC or their designee the authority to waive mandatory and non-mandatory fees, with the exception of the "instructional and support technology fee." The "instructional and support technology fee" may be waived only under the following circumstances:

- Faculty, staff, and administrators participating in staff development activities related to the employee's job or career in the organization and studying at Coastal Pines Technical College. The employee must meet the applicable admissions standards Page 3 of 5 and have received the appropriate prior authorization from the President of CPTC or Assistant Commissioner of TCSG.
- For transient students enrolled in more than one Technical College during the same term, only the home Technical College shall charge the instructional support and technology fee. If the transient student is not attending the home college, the college that the student registered at first will charge the fee. The student is responsible for providing proof of payment to the remaining colleges in which they are registered. In this case, the home college will not charge the fee. All other Transient Students shall pay the instructional support and technology fee.

All waivers of student tuition and fees not addressed specifically in TCSG State Board Policy 6.6.1, or in this procedure must be approved by the Commissioner of TCSG. Written documentation for each waiver must be maintained by CPTC.

A record of all waivers shall be maintained by the college in the BANNER student registration and account system. Pursuant to the procedures authorized by the Commissioner of TCSG, the President of CPTC may waive tuition for students on a term-by-term basis. The number of waivers shall not exceed five percent of the headcount of the student enrollment at Coastal Pines Technical College in the immediately preceding fall term.

Notwithstanding any provision in this policy, no person who is unlawfully present in the United States shall be eligible for any waiver of the tuition differential.

Exemption of Mandatory Fees for U.S. Active-Duty Military, Military Reserve, and Georgia National Guard Combat Veterans

Eligible participants must be Georgia residents who are active members of the U.S. Active Duty Military, Military Reserves, and/or the Georgia National Guard and were deployed overseas for active service in a location or locations designated by the U.S. Department of Defense as combat zones on or after September 11, 2001, and served for a consecutive period of one hundred and eighty-one (181) days, or who received full disability as a result of injuries received in such combat zone or were evacuated from such combat zone due to severe injuries during any period while on active service. Additionally, eligible participants must meet the admissions requirements of the applicable TCSG institution and be accepted for admission.

Upon request, eligible participants shall receive an exemption from all mandatory fees charged by TCSG institutions for a term for which all students are required to make payment.

Students receiving this exemption shall be eligible to use the services and facilities these fees are used to provide. This benefit shall not apply to housing, food service, any other elective fees, special fees, or other user fees and charges (e.g., application fees).

Exemption of Tuition and Fees

Upon request, Georgia residents over sixty-two (62) years of age may attend technical colleges, for credit courses only, without charge or payment of the standard tuition rate on a space-available basis.

Adult Education students attending adult basic education programs shall not be charged tuition for such non-credit instruction or any other fee, nor be required to purchase any books or other materials that are needed for participation in the adult education program.

Dually Enrolled High School or Adult Education Students

Tuition and fees for all dually enrolled high school students or dually enrolled adult education students, up to

the amount not covered by HOPE or Dual Enrollment Funding may be exempted. If Coastal Pines Technical College utilizes this option, it must apply to all dual-enrolled high school students or dually enrolled adult education students attending CPTC for the time frame the exemption applies.

The President has the authority to exempt all fees including the "instructional and support technology fee" for military members using tuition assistance.

Presidents have the authority to exempt up to 36 months of tuition and fees toward the award of an associate degree, diploma, or certificate, for military members awarded the Purple Heart or higher combat decoration (Bronze Star with valor, Silver Star, Coast Guard Cross, Navy Cross, Air Force Cross, Distinguished Service Cross, or Metal of Honor), their spouses, or their legal dependents up to 26 years of age. To qualify, students must first exercise all potential financial aid options available (Pell, VA benefits, HOPE grant, etc.).

Mandatory and non-course-related fees for all dual enrollment students must be exempted. Course-related fees and supplies, not including book(s), may be assessed.

Notwithstanding any provision in this policy, no person who is unlawfully present in the United.

States shall be eligible for any exemption of the tuition and applicable fees.

Registration Related Fees and Expenses Definitions

Special Instructional Fee

The Special Instructional Fee is assessed credit students each term to assist with instructional costs.

Instructional Technology Fee

The Instructional Technology fee is assessed each term to all credit students to assist in providing instructional resources and technology.

Registration Fee

The registration fee is assessed to credit students each term at the time of registration.

Parking and Facilities Fee

All students and employees may obtain and display a Coastal Pines Technical College parking decal. Parking decals can be obtained in the Student Affairs Office. Students are required to pay the non-refundable Parking and Facilities Fee each semester.

Student Activity Fee

A student activity fee is charged each term to each student taking credit courses at CPTC. Activity fees are used to promote the interests of college organizations and activities. Students taking courses entirely online are not required to pay this fee.

Campus Security Fee

A campus security fee is assessed each term to credit students to assist with campus security costs.

Student Accident Insurance Fee

Some allied health and service program students are required to obtain malpractice insurance for coverage in the internship and clinical education.

Program Fees

Students in certain programs or courses that have higher operational costs are subject to additional fees.

The Program Fee is assessed to students in the following majors:

Allied Health Programs:

- Medical Assisting

- Neuromuscular Massage Therapy
- Paramedic, EMT, EMS Professions, AEMT, EMS Pre-Hospital
- Phlebotomy
- Practical Nursing
- Radiology Technology
- Registered Nursing
- Respiratory Therapy
- Surgical Technology
- Health Care Assistant

Professional Services:

- Paralegal

Technical and Industrial Programs:

- Engineering Technology
- Machine Tool
 - CNC Specialist
 - Metals Technician
- Naval Maintenance
- Welding and Joining
 - Basic Shielded Metal Arc Welder
 - Gas Metal Arc Welder
 - Gas Tungsten Arc Welder
 - Advanced Shielded Metal Arc Welder

Late Registration Fee

Late registration will be allowed for students accepted prior to the beginning of the term who do not register and pay fees prior to the close of Open Registration on a space-available basis. An additional fee may be charged for late registration. Late registration begins at the close of Open Registration and continues through the first three business days of the term.

Textbooks, Supplies and Clothing

Students may be required to have books, tools, clothing, safety gear and other equipment appropriate to the program of study. All required books and many of the students' other needs may be purchased at the CPTC College stores.

TUITION AND FEES

INSTRUCTIONAL TECHNOLOGY FEE	\$110.00
SPECIAL INSTRUCTIONAL FEE	\$60.00
REGISTRATION FEE	\$65.00
STUDENT ACTIVITY FEE	*\$35.00
STUDENT ACCIDENT INSURANCE FEE	*\$6.00
CAMPUS SECURITY FEE	\$45.00
PARKING & FACILITIES FEE	\$35.00
TOTAL FEES	\$356.00

*Activity Fee and Accident Insurance Fee is not applied to all online courses.

**PROGRAM FEE \$45.00

**Some programs may have additional program-specific fees, please see the program fee schedule for all program fees.

*The following programs are assessed an additional Program Fee:

ALLIED HEALTH PROGRAMS

ADVANCED EMERGENCY MEDICAL TECHNICIAN, EMS PRE-HOSPITAL OPERATIONS, EMS PROFESSIONS, EMERGENCY MEDICAL TECHNICIAN, HEALTH CARE ASSISTANT, HEALTH CARE SCIENCE, MEDICAL ASSISTING, NEUROMUSCULAR MASSAGE THERAPY, PARAMEDICINE, PHLEBOTOMY, PRACTICAL NURSING, RADIOLOGIC TECHNOLOGY, RESPIRATORY CARE, SURGICAL TECHNOLOGY

BUSINESS AND COMPUTER
ENGINEERING TECHNOLOGY, PARALEGAL

TECHNICAL AND INDUSTRIAL

MACHINE TOOL TECHNOLOGY, METALS TECHNICIAN, CNC SPECIALIST, NAVAL MAINTENANCE APPRENTICE, WELDING AND JOINING TECHNOLOGY INCLUDING BASIC SHIELDED METAL ARC WELDER, ADV. SHIELDED METAL ARC WELDER, GAS METAL ARC WELDER, GAS TUNGSTEN ARC WELDER

CREDIT HOURS	TUITION	IN-STATE	OUT-OF-STATE	FOREIGN
		TUITION AND FEES	TUITION AND FEES	TUITION AND FEES
1	\$107.00	\$463.00	\$570.00	\$784.00
2	\$214.00	\$570.00	\$784.00	\$1212.00
3	\$321.00	\$677.00	\$998.00	\$1640.00
4	\$428.00	\$784.00	\$1212.00	\$2068.00
5	\$535.00	\$891.00	\$1426.00	\$2496.00
6	\$642.00	\$998.00	\$1640.00	\$2924.00
7	\$749.00	\$1105.00	\$1854.00	\$3352.00
8	\$856.00	\$1212.00	\$2068.00	\$3780.00
9	\$963.00	\$1319.00	\$2282.00	\$4208.00
10	\$1,070.00	\$1426.00	\$2356.00	\$4636.00
11	\$1,177.00	\$1533.00	\$2710.00	\$5064.00
12	\$1,284.00	\$1640.00	\$2924.00	\$5492.00
13	\$1391.00	\$1747.00	\$3138.00	\$5920.00
14	\$1498.00	\$1854.00	\$3352.00	\$6348.00
15	\$1605.00	\$1961.00	\$3566.00	\$6776.00

Program Specific Fees

ALLIED HEALTH PROGRAMS

Medical Assisting

Supply Fee	\$50.00	Students enrolled in MAST 1090
Malpractice Liability Insurance	\$4.00	Students enrolled in MAST 1080, MAST 1090, and MAST 1170

Neuromuscular Massage Therapy

Program Fee	\$45.00	per semester, while enrolled in occupational courses.
Supply Fee	\$50.00	Students enrolled in NEUT 1050
Malpractice Liability Insurance	\$4.00	Students enrolled in NEUT 1060 & NEUT 1120

Nurse Aide

Malpractice Liability Insurance	\$4.00	Students enrolled in NAST 1100 or NAST 2100
CPR Card	\$10.00	Students enrolled in ALHS 1040

Paramedicine, EMS Professions, Pre-Hospital Operations, Emergency Medical Technician, Adv. Emergency Medical Technician

Program Fee	\$45.00	per semester, while enrolled in occupational courses.
Supply Fee	\$50.00	Students enrolled in EMSP 1510
Malpractice Liability Insurance	\$17.60	Students enrolled in EMSP 1160, EMSP 1530, EMSP 1540 EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560, EMSP 2570, EMSP 2710, and EMSP 2720

Phlebotomy

Program Fee	\$45.00	per semester, while enrolled in occupational courses.
Supply Fee	\$50.00	Students enrolled in PHLT 1030
Malpractice Liability Insurance	\$4.00	Students enrolled in PHLT 1050

Practical Nursing and Health Care Assistant

Program Fee	\$45.00	per semester, while enrolled in occupational courses.
Malpractice Liability Insurance	\$4.00	per semester, while enrolled in PNSG 1605, 1610, 1615, 1620, 1625, 1630, 1635, 1640, and 1645
CPR Card	\$10.00	Students enrolled in ALHS 1040 and PNSG 2030
ATI dues (Previous <i>Practical Nursing Cohorts</i>)	\$617.00	1st, 2nd, and 3rd semester
ATI dues beginning Spring Cohorts	\$672.67	PNSG 1605, PNSG 1620, and PNSG 1610.

Radiologic Technology

Program Fee	\$45.00	per semester, while enrolled in occupational courses. (Students enrolled in RADT 1010, RADT 1030, RADT 1320, RADT 2340, RADT 2360)
Dosimeter	\$54.00	Students enrolled in RADT 1320, RADT 1330, RADT 2340, RADT 2360
Technology Fee (ARRT)	\$225.00	Students enrolled in RADT 2260

Kettering Review Fee	\$219.00	Students enrolled in RADT 2260
Malpractice Fee	\$4.00	Students enrolled in RADT 1320, RADT 1330, RADT 2340, and RADT 2360
CPR Card	\$10.00	Students enrolled in RADT 1010

Registered Nursing

Program Fee	\$510.00	per semester, a combination of the ASN Technology fee and lab fee
Malpractice Insurance	\$4.00	per semester, while in RNSG 2023 and RNSG 2022
HESI fee	\$100.00	Student enrolled in RNSG 2021, RNSG 2022, RNSG 2029, RNSG 2031, RNSG 2033

Respiratory Care

Program Fee	\$45.00	per semester, while enrolled in occupational courses. (Students enrolled in RESP 1120, RESP 2170, and RESP 1193)
Trajecsys	\$100.00	Students enrolled in RESP 2090
SAE Respiratory Test Fee (3 Exams - \$40, \$40, \$60)	\$140.00	Students enrolled in RESP 2170
Kettering Seminar	\$325.00	Students enrolled in RESP 2130
Classmate	\$85.00	Students enrolled in RESP 2100
CPR Card	\$10.00	Students enrolled in RESP 1130
Malpractice Liability Insurance	\$4.00	Students enrolled in RESP 1130, RESP 2090, RESP 2100, RESP 2180, RESP 2190, RESP 220 and RESP 2200

Surgical Technology

Program Fee	\$45.00	per semester, while enrolled in occupational courses.
AST dues & Certification Exam	\$195.00	Students enrolled in SURG 2240
Dosimeter	\$54.00	Students enrolled in SURG 2110 and SURG 2120
Board Vitals Fee	\$158.00	per semester, while enrolled in occupational courses.
Malpractice Liability Insurance Fee	\$ 4.00	Enrolled in SURG 1010, SURG 1020, SURG 2130, and SURG 2140

BUSINESS AND COMPUTER

Paralegal

Program Fee	\$45.00	per semester, while enrolled in occupational courses.

PROFESSIONAL SERVICES

Cosmetology

Malpractice Liability Insurance Fee	\$4.00	Students enrolled in COSM 1090, COSM 1100, COSM 1110, COSM 1115, & COSM 1125

Early Childhood Care and Education

Malpractice Liability Insurance Fee	\$4.00	Students enrolled in ECCE 1121 & ECCE 2240

TECHNICAL AND INDUSTRIAL PROGRAMS

Air Conditioning Technology

HVAC Excellence Exam Fee	\$20.00	Students enrolled in AIRC 1030, AIRC 1080

Commercial Truck Driving

CDL Fuel Fee	\$225.00	Students enrolled in CTDL 1021
Random Drug Testing Fee	\$155.00	Students enrolled in CTDL 1021
Instructional Technology Fee	\$110.00	
Special Instructional Fee	\$60.00	
Registration Fee	\$65.00	
Student Activity Fee	\$35.00	
Accident Insurance Fee	\$6.00	
Campus Security Fee	\$45.00	
Parking and Facilities Fee	\$35.00	
TOTAL FEES	\$681.00	

CREDIT HOURS	TUITION	TUITION AND FEES	OUT-OF-STATE TUITION AND FEES
9	\$139.00	\$1,932.00	\$3,183.00

Electrical Lineworker Apprentice

Random Drug Testing Fee	\$155.00	Students enrolled in ELCR 1920

Engineering Technology

Program Fee	\$45.00	per semester, while enrolled in occupational courses.

Machine Tool Technology, CNC Specialist, Metals Technician

Program Fee	\$45.00	per semester, while enrolled in occupational courses.

Naval Maintenance Apprentice

Program Fee	\$45.00	per semester, while enrolled in occupational courses.

Timber Harvesting Operations

Malpractice Liability Insurance	\$4.00	Students enrolled in THOP 1105, THOP 1106

Welding and Joining Technology, Basic Shielded Metal Arc Welder, Gas Metal Arc Welder, Gas Tungsten Arc Welder, Advanced Shielded Metal Arc Welder

Program Fee	\$55.00	per semester, while enrolled in occupational courses.

Other Fees and Expenses

Application Fee	\$25.00	one time, non-refundable
Exemption Exam Fee	25% of tuition	Cannot be paid by financial aid
ID Replacement Fee	\$5.00	each
Parking Decal Replacement Fee	\$2.00	each
Placement Exam Retest Fee	\$15.00	each
Graduation Participation Fee	\$40.00	per ceremony (non-refundable)
Award Replacement/Reprint Fee	\$25.00	each
Transcript Fee	\$10.00	each
Express Transcript Fee	\$15.00	each
Return Check Fee	\$30.00	per occurrence
Nelnet Default Administrative Fee	\$40.00	per occurrence

Payments may be made to the cashiers during regular business hours or online via BannerWeb.

The College will accept personal checks with proper identification for fees, tuition, services, and bookstore items. When a bank refuses to honor a personal check, the college shall charge a service fee to the person who presented the check. This service fee may not exceed \$30 and will include the amount of any fee charged to the College by the financial institution.

Students shall be notified by mail of a dishonored check and the Business Office shall place an "administrative hold" on the students' accounts and records. Until the "administrative hold" is cleared, the student shall not be issued grade reports, transcripts, or any other student records, or allowed to register, graduate or receive college services. If the dishonored check was for tuition, the college may also administratively drop or withdraw the student from class(es).

Due diligence in collection activities will be practiced by the College, up to and including referral to court and/or collection agencies, as deemed appropriate.

Refund Guidelines

The following guidelines apply to refunds of tuition and fees:

Students who are delinquent in the payment of any financial obligation(s) will be placed on "Hold" and will not be allowed to register until all delinquent fees are paid. In addition, students will not be allowed to access grade reports or other student records until all delinquent fees are paid. Students may incur additional fees if the debt is turned over to a collection agency.

All tuition and fees, excluding the application fee, shall be refunded if a student does not commence class attendance.

Students withdrawing from a course by the end of the fifth day of the term (excluding Saturday and Sunday) and no-shows shall receive a 100% refund of applicable tuition (hours below the 15-hour tuition cap) and applicable refundable fees, excluding the application fee. Exceptions may be allowed for customized courses that do not follow the CPTC's standard academic calendar. Students must be notified of each semester or module's deadline.

Students who withdraw from a course **after the fifth day** of the term shall receive **no refund**.

Students utilizing Tuition Assistance (TA) through the Department of Defense (DOD), who withdraw from any course before the 60% point of the term, will have unearned funds returned on a proportional basis to the TA program. The calculation will be based on the number of days completed divided by the total days in the enrollment period (semester).

For those students receiving federal financial aid, Coastal Pines Technical College shall make available Consumer Information that may be found at <https://fsapartners.ed.gov/knowledge-center/fsa-handbook>

under the appropriate aid year's Handbook. Although there will be no refund of tuition and fees after the fifth day, withdrawing students receiving Federal Pell Grant will have awards adjusted in compliance with the Return to Title IV process (R2T4) outlined in the Federal Student Aid Handbook.

Return to Title IV Funds Policy

Students who are receiving assistance from federal financial aid, Federal Pell Grant, or Federal Supplemental Education Opportunity Grant (FSEOG), and withdraw from all classes prior to completing more than 60 percent of the semester will have their eligibility for financial aid recalculated and may be required to repay all or a portion of any federal financial aid funds received for that semester. This policy applies to all students who withdraw, drop out, or are suspended or expelled from CPTC and who have received Title IV funds. Students are responsible for paying this debt. Students' records will be placed on hold and he/she will not be allowed to register for classes until this amount owed is paid in full.

Non-Credit Courses

- Persons enrolled in non-credit courses that are canceled due to insufficient enrollment at the discretion of the College will receive a 100% refund of all fees.
- Persons providing written notification to the Economic Development Department at least 48 hours prior to the beginning of a course will receive a 100% refund of all fees.
- No refunds will be made after the course begins without the written approval of the Vice President for Economic Development.

Bookstore

- No refunds shall be made for used supplies and equipment such as cosmetology kits, jump drives, and tools. CPTC logo items are also not eligible for a refund. Exchanges may be allowed for a limited time.
- Refunds shall be made for books and/or codes that are returned in new condition with seals and shrink wrap (if applicable) intact and accompanied by the receipt in accordance with the CPTC Book Refund Procedure. The Book Refund Procedure shall be prominently posted in the College Bookstore.
- No refund shall be made for books issued to students participating in the Dual Enrollment program.

National Emergencies

- All tuition and fees will be refunded to any student who is required to withdraw from courses as a result of being called into active duty.
- All tuition and fees will be refunded to any student required to relocate in response to a national emergency.

Special Conditions

- No refund of tuition and fees shall be made to any student who has commenced attendance and does not formally withdraw, is suspended for disciplinary reasons, or leaves the college as a result of disciplinary action.
- No refund of tuition and fees shall be made for reducing course load after the first five instructional/business days of the term unless the college is at fault.

Disbursement

- Refunds shall be made without requiring a request from the student.
- Refunds shall be made within 30 days of the last day of attendance if written notification of withdrawal has been provided to the College by the student or within 30 days of the date the institution was made aware of an unofficial withdrawal.

Financial Obligations - Holds

Students who are delinquent in the payment of any financial obligation(s) will be placed on "Hold" and will not be allowed to register until all delinquent fees are paid. In addition, students will not be allowed to access grade reports or other student records until all delinquent fees are paid. Students may incur additional fees if the debt is turned over to a collection agency.

Attendance

Establishing a consistent and acceptable pattern of attendance is considered an integral part of the total educational process. Coastal Pines Technical College (CPTC) stresses the importance of attending classes as scheduled, and each instructor shall evaluate student attendance and punctuality for each course.

CPTC Procedure: Attendance and Withdrawal

Attendance / Withdrawals / Reinstatement

Students are expected to be punctual and attend all classes for which they are registered. For purposes of federal Title IV financial aid, CPTC does not require attendance. Any attendance requirements for specific courses will be clearly stated in the course syllabus. The U.S. Department of Education requires institutions to be able to demonstrate that federal aid recipients established eligibility for federal aid by participating in academic-related activities for all enrolled course work. Participation includes completing activities such as submitting assignments, taking exams/quizzes, interactive tutorials, or computer-assisted instruction. Students enrolled in online courses are expected to participate in the online class by completing assignments, contributing to online discussions, and initiating contact with a faculty member. Logging into the online class does not establish student enrollment and participation in the course. Students must establish enrollment and course participation each semester before financial aid funds are disbursed. Student attendance will be monitored for the first five (5) calendar days of each term. Monitoring attendance beyond the fifth day is at the instructor's discretion.

To receive a 100% refund, the student must officially withdraw from their course(s) within the first five calendar days of the term. Students can officially withdraw by completing the Electronic Course Withdrawal Form located on their Okta account, OR the STUDENT can email their instructor notifying them that they wish to withdraw from the course OR complete a paper withdrawal form located in admissions and have the instructor sign and submit the completed form to the Registrar's Office by the close of business on the fifth business day of the term.

Students who withdraw from a course after the end of the fifth business day of the term shall receive a grade of 'W' and shall receive no refund of tuition and fees.

In instances where students are administratively dropped from the course(s) because of nonpayment, the student must contact their instructor to request reinstatement. Reinstatement is not guaranteed.

No Show Status

Students are expected to attend all classes for which they are registered. Instructors will monitor attendance through the first five (5) calendar days of each academic term. Students who do not establish a presence (attendance) in at least one class session will be reported as a No Show for the course and if applicable, tuition will be adjusted, and financial aid reduced accordingly.

Dual Enrollment

Dual enrollment students need to contact their high school counselor in order to withdraw from a course. The high school counselor will be expected to contact a Coastal Pines Technical College Dual Enrollment Advisor to process the withdrawal. Active high school students will not be withdrawn without confirmation from their high school counselor.

Formal Official Withdrawal

Students who wish to officially withdraw from an individual course but remain enrolled in other courses must officially withdraw from the course by completing the Electronic Course Withdrawal Form located on the students' OKTA account OR emailing their instructor notifying them they wish to withdraw, OR complete the paper Course Withdrawal Form located in admission and have the instructor sign, and then submit to the Registrar's Office.

Students who would like to officially withdraw from all courses are strongly encouraged to consult with their Academic Advisor and the Financial Aid Office prior to withdrawing. Withdrawing from a course may have a negative effect on their academic standing, satisfactory academic progress status, financial aid awards, and student account balance. The student's official withdrawal date will be the date the student initiates the withdrawal. A student who wishes to withdraw from all courses must withdraw themselves either through BannerWeb OR by listing all the courses on the Course Withdrawal Form.

Unofficial Withdrawal

Students who stop attending class but do not officially withdraw are considered to have unofficially withdrawn. All students who unofficially withdraw before the midpoint of the term will be assigned an unofficial withdrawal date identified as the 50% point of the term. Students with documented attendance beyond the midpoint of the term may be assigned a later withdrawal date.

Students who stop attending class, but do not formally withdraw, may receive a grade of F and could face financial aid repercussions in upcoming semesters. Unless otherwise specified in a program attendance procedure as required by the program accreditation/licensing agency, students will not be withdrawn by an instructor for attendance.

Last Date of Activity Guidelines

The purpose of the last date of activity is to appropriately assess the financial liability for students and limit the financial liability for the College as well as the academic consequences for the student. The last date of the activity will be documented by the instructor through an "academically related activity." An academically related activity is demonstrated through active participation (simply logging into an online class is not considered active participation).

Academically related activities include, but are not limited to the following:

- Physically attending a class where there is an opportunity for direct interaction between the instructor and students
- submitting a current academic assignment
- completing an exam, an interactive tutorial, or computer-assisted instruction
- participating in an online discussion within a course
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course.

Courses that Require Attendance

Student Responsibility

Some academic programs have specific attendance policies. These policies will be located in the course syllabus and addressed by instructors during course introductions. It is the student's responsibility to properly withdraw from a class if required attendance cannot be maintained.

Attendance Records

The instructor's class grade book or distance education learning management system (LMS) platform or the Banner Attendance module maintained by the instructor is the College's official student record for all matters pertaining to attendance and course completion.

Course Withdrawal

Class attendance is a very important aspect of student success. Being absent from class prevents students from receiving the full benefit of a course and interrupts the learning process. Coastal Pines Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests

with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Attendance is required to be taken during the first session of a class and reported to the Registrar's Office through BannerWeb by each instructor. Instructors are responsible for maintaining records of attendance to comply with financial aid and federal regulations.

In instances where students are administratively dropped from the course(s) as a result of non-payment, the student must contact the Registrar's Office to request reinstatement. Reinstatement is not guaranteed.

Students should complete the electronic withdrawal form to officially withdraw from a class. This form can be found under the student's Okta dashboard. Students who stop attending class, but do not formally withdraw, will receive a grade of F and could face financial aid repercussions in upcoming semesters. Unless otherwise specified in a program attendance procedure as required by the program accreditation/licensing agency, students will not be withdrawn by an instructor for attendance. However, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities may be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course. For unofficial withdrawals without notification, or when the last date of attendance is unknown or before to the midpoint, the midpoint of the payment period or period of enrollment will be used as the student's last date of attendance.

The purpose of the last date of attendance is to appropriately assess the financial liability for students and limit the financial liability for the College as well as the academic consequences for the student. The last date of attendance will be documented by the instructor through an "academically related activity." An academically related activity for attendance is demonstrated through active participation (simply logging into an online class is not considered active participation). Academically related activities include, but are not limited to the following:

- Physically attending a class where there is an opportunity for direct interaction between the instructor and students
- submitting a current academic assignment
- completing an exam, an interactive tutorial, or computer-assisted instruction
- participating in an online discussion within a course
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course.

Assignments missed due to tardiness, early departure, or absences may be made up only at the discretion of the instructor or the procedure outlined in the course syllabus.

It is the responsibility of the student to make arrangements with the instructor for missed assignments due to documented absences related to jury duty or military duty, official college activities, or medical emergencies. Make-up work is at the discretion of the instructor and students are encouraged to make arrangements in advance when possible. Requirements for instructional and clinical hours for programs that have accrediting agencies or licensure boards reflect the rules of the respective agencies. Therefore, class and clinical attendance are required. The procedure for absences is determined by the program lead instructor, program director, or program clinical coordinator. Procedures for making up time in these specific programs will be outlined in the course syllabus.

Class Tardiness

Class tardiness procedures will vary by the course and/or program of study. This information will be located in the course syllabus and addressed by instructors during course introductions.

Make up of Work Missed

Make up work procedures will vary by the course and/or program of study. This information will be located in the course syllabus and addressed by instructors during course introductions.

Distance Education Participation

Coastal Pines Technical College (CPTC) is committed to providing students the opportunity to access quality instruction online. Establishing a consistent and acceptable pattern of logging in and submitting work is considered an integral part of the total educational process. Employers who hire Technical College System of Georgia graduates consistently stress the importance of having a good punctuality record. Students are receiving an education for direct entry into the workforce. CPTC has the responsibility of attempting to instill in each student the importance of a good attendance and punctuality record. Because of this importance, an evaluation of participation is done in each course.

Students in distance education classes must complete an academic assignment within the first five (5) calendar days of the academic term. Students who fail to complete an academic assignment within five days will be considered a "No Show". Students enrolled in distance education classes should actively participate in class assignments as prescribed by the course syllabus and/or instructor. Students in Distance Education courses should follow the procedures for participation and withdrawal as outlined for all courses in the handbook.

Programs Resulting in Licensure

A student who is enrolled in a program that requires licensure will be required to make up clinical hours in accordance with the program's policy. Otherwise, consent document to take the licensing or certification examination will not be signed by the instructor of that program. Students are responsible for reading and complying with attendance guidelines. Attendance regulations of programs in some fields that require licensure may exceed those of CPTC.

Attendance Appeal Process

A student who has been unofficially withdrawn from a class as a result of non-attendance can appeal for reinstatement into the class. During the appeal procedure, the student will continue to attend the class until the issue is resolved. The student has three (3) business days from the date of withdrawal to implement the appeal process, which is delineated below:

Step One (Business Days 3 through 5)

The student should appeal for reinstatement into the class, with the instructor who enforced the attendance procedure, within five business days of the withdrawal. The student's appeal packet should include a completed CPTC Student Attendance Appeal Form and supporting documentation (letters or memoranda should be typed). The instructor will respond within two business days to the student's appeal via CPTC email to the student. If the issue is not resolved by the instructor, the student has two business days to appeal to the Dean.

Step Two (Business Days 6 through 10)

The student should schedule an appointment with the Dean to continue the appeal process. The student should present the appeal packet and a copy of the instructor's response to the student's initial appeal. The student should discuss with the Dean any extenuating circumstances that may have caused absences. The Dean will review the student's appeal packet and respond to the student via CPTC email within three business days of receipt of the appeal. If the issue is not resolved by the Dean, the student has two business days to appeal to the Vice President for Academic Affairs for a final decision.

Step Three (Business Days 11 through 13)

The student should contact the Office of the Vice President for Academic Affairs (VPAA) for an appointment concerning the appeal. The student should present the appeal packet and copies of responses from the

instructor and Dean. The student should discuss with the VPAA any extenuating circumstances that may have caused absences. The VPAA will review the student's appeal packet and respond to the student via CPTC email within three business days of receipt of the appeal. The decision of the VPAA is final.

The timeline for the appeal process listed above represents the maximum processing time for this procedure. The process will be expedited when possible.

Grades

Grades are awarded according to the following system:

Credit Courses:	Grade	Numeric Score	Quality Points
	A	90 – 100	4
	B	80 – 89	3
	C	70 – 79	2
	D	60 – 69	1
	F	0 – 59	0
	W	Withdrawn	Not Computed
	WP	Withdrawn Passing	Not Computed
	WF	Withdrawn Failing	0
	Z	COVID-19 Withdrawal	Not Computed
	I	Incomplete	Not Computed
	IP	In Progress	Not Computed
	AC (A, B, C)	Articulated Credit	Not Computed
	AU	Audit	Not Computed
	TR (A, B, C, M)	Transfer Credit	Not Computed
	EXE, EXP	Exemption Credit	Not Computed
Learning Support:			
	A*	90 – 100	Not Computed
	B*	80 – 89	Not Computed
	C*	70 – 79	Not Computed
	D*	60 – 69	Not Computed
	F*	0 – 59	Not Computed
	W*	Withdrawn Failing	Not Computed
Non-Credit:			
	S	Satisfactory	Not Computed
	U	Unsatisfactory	Not Computed

W – This grade signifies that a student withdrew from a course on or before the last day of the semester, whether the work is passing or failing. No credit is given and no grade points are calculated. A grade of “W” is not included in calculating the grade point average but is counted as coursework attempted.

WP – Effective January 1, 2020, this grade is no longer issued, but may appear on transcripts for courses taken prior to this date. This grade signifies that a student withdrew from a course after the 60% mark of the term, had a passing average at the time of withdrawal, and was making satisfactory progress. A grade of “WP” is not included in calculating the grade point average but is counted as coursework attempted.

WF – Effective January 1, 2020, this grade is no longer issued, but may appear on transcripts for courses taken prior to this date. This grade signifies that a student withdrew from a course after the 60% mark of the term, had a failing average at the time of withdrawal, and was not making satisfactory progress at the time of withdrawal. A grade of “WF” is calculated in the grade point average as an “F” and is counted as coursework attempted.

Z – Effective for spring semester 2020, this grade represents withdrawal from a course prior to completion due to the COVID-19 emergency. This grade does not have numerical equivalents and will not be calculated in the GPA. This grade is unacceptable credit in a course.

I – This grade signifies that a student has satisfactorily completed 80% of the class days of the required coursework, but for non-academic reasons beyond the student’s control, has not been able to complete the course. The incomplete is assigned only after the student has made arrangements with the instructor for fulfilling the course requirements and received approval from the Vice President for Academic Affairs or designated representative. Grade of “I” not cleared by the end of the following term will be converted to an “F”.

IP – This grade signifies that for administrative reasons the course continues beyond the end of the term. Grades of “IP” not cleared by the end of the following term will be converted to an “F”.

AC (A, B, C) – Articulated credit may be awarded for coursework completed under formal articulation agreements when established competencies have been achieved. A grade of AC will be given for the course(s). The third letter indicates the grade earned in the course.

AU – A student may choose to audit a class rather than take it for credit. By auditing a class the student is allowed to attend class in accordance with the following guidelines: (1) meet established admissions requirements of Coastal Pines Technical College, (2) have the approval of the instructor and follow regular registration procedures, (3) obtain prior approval from the Vice President for Academic Affairs for any changes from audit to credit or credit to audit status, and (4) pay the appropriate fee for auditing the course. Anyone auditing must attend class and observe normal attendance requirements. The audit period of a class must conform to the same time period allowed for credit, with no extension of time. An audit grade may not be later changed to a credit grade. A student who is auditing a course is eligible to receive all materials available to credit students except for tests. The instructor may provide "practice tests" for the audit student. Students auditing a class are not eligible for financial aid for that course.

TR (A, B, C, M) – A grade of "TR" indicates that the student has successfully completed the course at another postsecondary institution or earned military credit. The third letter indicates the grade earned in the course and the M represents Military credit; however, this grade will not count in the cumulative Grade Point Average (GPA). The student will however, receive comparable credit hours at CPTC for the credit hours received at the former institution.

EXE – A grade of "EXE" indicates that a student has exempted a course through examination. Credit is given but grade points are not calculated.

EXP – A grade of "EXP" indicates that a student has exempted a course through portfolio presentation. Credit is given but grade points are not calculated.

S – A grade of "S" indicates that the student has successfully mastered all of the course competencies. A grade of "S" carries no quality points, but institutional credit hours for that course will be awarded to the student.

U – A grade of "U" indicates that the student did not master of the course competencies. A grade of "U" carries no quality points.

Work Ethics

Coastal Pines Technical College, a unit of the Technical College System of Georgia, instructs and evaluates students on work ethics in all programs of study. Ten work ethic traits have been identified and defined as essential students success; students will be graded on work ethic traits in each occupational course (excluding general education, basic skills and learning support courses):

- Attendance
- Productivity
- Organizational Skills
- Attitude
- Communication
- Appearance
- Cooperation
- Teamwork
- Respect
- Character

A work ethic grade will be assigned at the end of each academic term. It will be recorded on each student's transcript but will not be calculated in the GPA. The grades assigned for work ethics are as follows:

- Exceeds expectations = 3
- Meets expectations = 2
- Needs improvement = 1
- Unacceptable = 0

The GRADE POINT AVERAGE (GPA) is calculated by multiplying the credits for each course by the quality points associated with the grade earned, totaling the points earned for all courses, and dividing the total points by the total number of credit attempts.

GPA Calculator

All grades will be assigned based on a 4.0 grading scale.

Quality Points are assigned to each letter grade.

- A = 4.0 quality points
- B = 3.0 quality points
- C = 2.0 quality points
- D = 1 quality point
- F = 0 quality points

The assigned values for the grades are A = 4, B = 3, C = 2, D = 1, and F = 0. (D & F are unacceptable credits in a course; therefore, those grades do not satisfy the graduation requirements)

Class Code	Course Title	Hours Attempted	Grade	Grade Value	Quality Points
MATH 1013	Algebra Concepts	3	A	4	12
ENGL 1010	English	3	B	3	9
ACCT 1100	Financial Accounting	4	F	0	0
EMPL 1000	Interpersonal Relations & Professional Development 2		C	2	4

For example, 25.0 Total Quality Points divided by 12.0 Hours Attempted equals a GPA of 2.08

Cumulative Grade Point Average/Overall (GPA)

The Cumulative Grade Point Average (CGPA) is calculated using all courses attempted/earned at Coastal Pines Technical College (CPTC) Learning Support courses are not calculated in the cumulative grade point average. The cumulative GPA is an attempt to reflect the total credit instructional activity of the student. It is recalculated

after each semester to include the current semester's grade(s). The CGPA is not affected by program of study, changes in the program of study, or student classification. The cumulative grade point average is that grade point average calculated on all attempts at all credit courses taken at Coastal Pines Technical College

Graduation Grade Point Average (GPA)

The Graduation Grade Point Average is calculated using only those courses required for graduation. The Graduation GPA is used to determine eligibility for Honor Graduates. When a course is taken more than once, the highest grades will be used in calculating the grade point average for graduation. A minimum 2.0-grade point average is needed for graduation. The program GPA is used to determine eligibility for Honor recognition at graduation.

Semester GPA

The semester grade point average is calculated based on all credit courses taken each semester at CPTC.

Transfer GPA

The Transfer GPA is calculated using credit accepted from other institutions. Credits transferred count toward the requirements for graduation, but are not included in the Institutional GPA. The Transfer GPA is not used to determine Academic Standing. The Transfer GPA is used for consideration of program admission into competitive entry programs.

Grades and Other Academic Appeals

A student may appeal a final grade or other academic decision in accordance with CPTC procedure. A student may appeal by submitting a typed letter of appeal to the instructor who awarded the grade or made the academic decision within ten (10) business days from the date the student learned or reasonably should have learned of the final grade or other academic decision.

If the appeal to the instructor does not satisfactorily resolve the student's concern, he or she may further appeal to the appropriate Dean for Academic Affairs by submitting a typed letter or email of appeal and the results of the appeal to the Dean within twenty (20) business days from the date the student learned or reasonably should have learned of the final grade or other academic decision.

If the student is not satisfied with the decision of the Dean, the student may appeal to the Vice President for Academic Affairs by submitting a typed letter or email of appeal and the results of appeals to the Vice President of Academic Affairs within thirty (30) business days from the date the student learned or reasonably should have learned of the final grade or other academic decision. The decision of the Vice President for Academic Affairs shall be final.

Graduation/Commencement Requirements

Students must apply for graduation and meet all program requirements in order to receive their Award(s). The Graduation Grade Point average calculated includes only those courses required for graduation. When a course is taken more than once, the final or highest grade will be used in calculating the grade point average for graduation. A 2.0 grade point average is required for graduation and the student must be in good standing with the college. The letter grade of D (60-69) will be awarded if earned but will not satisfy graduation requirements.

There is no charge to receive a degree, diploma or certificate of credit; however, you must apply in order to have your award printed.

Academic Standing

President's List

In order to recognize outstanding student academic achievement, a President's List is published each term. This list will consist of CPTC students enrolled full time who have attained a semester GPA of 4.0. A cumulative GPA of 2.0 or higher is also required. Students will be recognized for this honor in local and area newspapers.

Dean's List

In order to recognize outstanding student academic achievement, a Dean's List is published each term. This list will consist of CPTC students enrolled full time carrying 12 and more credit hours, who have attained a semester GPA of 3.75 - 3.99 out of a possible 4.0. A cumulative GPA of 2.0 or higher is also required. Students will be recognized for this honor in local and area newspapers.

Academic Probation

The purpose of academic probation is to alert students to the fact their academic performance is not acceptable and to point out the consequences if improvements are not made during the next term of enrollment. A student who fails to maintain a minimum 2.0 semester GPA, for all work attempted in the term, shall be placed on academic probation. A student placed on academic probation (or admitted on academic probation) must attain a minimum 2.0 semester GPA during the next term of attendance to remove himself/herself from academic probationary status. Failing to attain a minimum semester GPA of 2.0 during the probationary term will result in the student being placed on academic suspension.

A student who fails to maintain the required grade point average in a particular program of study may be placed on academic probation. Failure to improve academic performance after being placed on probation shall result in suspension or dismissal from either the academic program or CPTC.

A student on academic probation is not eligible for graduation.

Academic Suspension

A student on academic probation who fails to attain a minimum semester GPA of 2.0 during the probationary term will be placed on academic suspension. A student on academic suspension must wait one full term before readmission. The student will return on academic probation. Upon readmission from academic suspension, any subsequent violation of academic probation will result in a second academic suspension.

Academic Dismissal

A student placed on academic suspension twice while in the same program will be permanently dismissed from that program, but may apply for admission to another program after waiting one term. After a third and any subsequent academic suspension, the student will be eligible to reapply for admission after one calendar year.

In appropriate circumstances, a student may be dismissed from an academic program or CPTC without first being placed on academic probation.

Readmission after Academic Dismissal

After an absence from CPTC for one calendar year, students may petition the Office of the Vice President for Academic Affairs to be considered for reinstatement. Students granted readmission to the college will be placed on Academic Probation.

Academic Appeals for Probation, Suspension and Dismissal

A student may appeal academic suspension/dismissal by submitting a letter (or email) of appeal to the Vice President for Academic Affairs (VPAA) within ten (10) business days from the date the student learned or reasonably should have learned of his or her suspension or dismissal from the College. Evidence of any extenuating circumstances should be included. If the VPAA approves, the suspension may be overturned for one term. The decision of the Vice President for Academic Affairs is final.

Additional Conditions

Cohort Programs

Because of the sequential nature of courses in certain programs (e.g. Practical Nursing, Cosmetology), a student will not be allowed to continue in the assigned cohort if a final grade of "D" or "F" is earned in any program course.

Allied Health Programs

All students enrolled in allied health programs will have their clinical program evaluated orally and in writing by their instructors with input from others responsible for their learning experiences. Unsatisfactory evaluations may be considered grounds for dismissal from the program. (See individual program evaluation requirements.)

Student Support Services

Coastal Pines Technical College (CPTC) offers a number of services to help students with disabilities find success in the academic and technical components of their program of study. A disability is described as a condition that impairs or restricts one or more major life activities. Disabilities may be deemed temporary or permanent impairments.

Special services are extended to students who have:

- Impaired vision or hearing
- Learning disabilities
- Physical disabilities
- Medical disabilities
- Psychological impairments

Request Initiation of Services:

It is the student's responsibility to notify the Student Success Coach of any special needs or disabilities the student may have that require accommodations in the classroom. During New Student Orientation, students complete a self-disclosure form that identifies any special need or disability that may require accommodations (which are reasonable) in the classroom setting(s), or a disability that may interfere or impede their academic success. The Student Success Coach is dedicated to assisting students with disabilities, learning disorders, and any other special physical or psychologically medically identified need.

To request and make arrangements for services, the student must have a meeting with the Student Success Coach to create a plan for classroom adjustments or accommodations. Contact Macy Evans, at mdevans@coastalpines.edu or 912-285-6361.

Student Responsibilities

- Provide appropriate documentation:
- Request classroom adjustments or accommodations every term.
- Return classroom accommodation forms after they are signed and reviewed by the instructor(s) to the Student Success Coach.
- Understand that other student services (Financial Aid, Admissions, Career, etc.) are the responsibility of the student.
- Adhere to the Student Code of Conduct.

Student Success Coach

The Student Success Coach provides students with the necessary referrals and services that will assist them in the completion of their educational objectives and retention in college.

The Student Success Coach assists:

- students who are experiencing academic difficulties in class
- students who have excessive attendance issues
- students who are experiencing other personal hardships or challenges that may affect their success.

The Student Success Coach serves as a liaison between Academic Affairs and Student Affairs. The Student Success Coach works with faculty to promote retention and student success through TEAMS (TCSG's Early Alert Management System). Using this system, faculty identify students who may be **at-risk for course completion** early in the semester and alert the Student Success Coach. **Early intervention** is usually more successful in order for the student to receive assistance before midterm.

- TEAMS Live Site for real alerts: <https://teams.tcsg.edu/>
- TEAMS Training Site for practice: <https://kmstrn.tcsg.edu/>

The Student Success Coach assists with:

- study tips
- test-taking strategies
- test anxiety tips
- motivation
- stress management
- time management
- referrals to tutoring
- additional tools for Student Success

Contact the CPTC Student Success Coach at 912-285-6361 for additional information.

Library

The mission of the Coastal Pines Technical College Library is to provide library resource and services which support the academic, cultural, and life-long learning needs of our students, faculty, staff, and local communities. The collection of resources available include print and electronic books, audiovisuals, journals and periodicals, current newspapers, scholarly online databases, interlibrary loan and select ADA equipment. Reference assistance and library instruction/orientation is also available. Space may include areas for study and leisure reading, computer utilization including Internet access and printing, study rooms and/or conference rooms, and computer labs.

Online Library Orientation

The Online Library Orientation can be found on the Library Services page at <http://libguides.coastalpines.edu/libraryservices>

Special Populations/Non-Traditional Programs

Coastal Pines Technical College provides support services for students who are in special population categories including:

- Individual with disabilities (documentation will be requested) - a physical or mental impairment which substantially limits one or more major life activities such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, or learning.
- Single Parent- students who have the primary or joint custody for a dependent child. (Can be divorced, widowed, legally separated, never married, or a person who is single and pregnant.)
- Out-of-workforce Individual – students who have been unemployed or underemployed to care for a home and/or family and for that reason have had difficulty in obtaining or upgrading employment.
- Individual preparing for non-traditional field – students are enrolled in a program of study that will lead to an occupation that is dominated by persons of the opposite sex. (Example: a female in welding or drafting or a male in a healthcare program).
- English Learner- students have a limited ability to write or understand English due to a language other than English as their primary language.
- Individual from economically disadvantaged families- students who are currently homeless, a youth who is in, or have aged out of, the foster care system, receive Pell Grant or federal assistance, including Food Stamps and/or Medicaid, a youth with a parent who is on active duty armed forces.

For information or questions, please contact Student Activities/Special Populations Coordinator, specialservices@coastalpines.edu.

Future Business Leaders of America (FBLA Collegiate)

FBLA Collegiate is a national student organization for students interested in business careers. FBLA Collegiate provides the students with opportunities to develop occupational competencies for business occupations and promotes a sense of civic and personal responsibility. Local, state, and national competitions are open to students in this organization.

National Technical Honor Society (NTHS)

The National Technical Honor Society is an organization that recognizes students who excel both academically and professionally. Members are nominated by their program instructors and must have a 3.50 or higher average (for a minimum of 30 semester hours) and no less than a 2.0 work ethics grade in every course. Graduates are recognized during the graduation ceremony by the honorary regalia. Membership fees are the responsibility of the student.

Student Government Association (SGA)

The Student Government Association offers opportunities for leadership development, fellowship, and volunteer activities. Each campus/site elects student representatives to serve as Delegates to the SGA. SGA plans activities and sponsors school and civic improvement projects. Activity fees are administered through the Student Activity Fund Council and Student Government Association.

SkillsUSA

SkillsUSA® is a professional organization that recognizes outstanding students in secondary and postsecondary education. SkillsUSA® members participate in chapter meetings, competitions, leadership conferences, and activities. Members conduct community service projects. They can also interact with local business people in their field of study. Through the SkillsUSA® Championships program, members can earn recognition, industry tools and prizes, and college scholarships by competing in local, state, and national competitions.

Lambda Nu (LN)

Lambda Nu (LN) is affiliated with the National office of the Lambda Nu National Honors Society for Radiologic and Imaging Sciences. Membership in the organization is open to all students enrolled in Radiologic Technology Program or Imaging Sciences Program at Coastal Pines Technical College. Student must have and maintain a 3.0 G.P.A. to be a member. Lambda Nu meets on the Waycross Campus only.

Georgia Occupational Award of Leadership (GOAL)

The GOAL program is held annually. Outstanding students are nominated by instructors, and finalists are selected on the basis of performance in their respective programs of study and in interviews with a panel of judges. The finalist represents CPTC in the statewide competition for major prizes and awards.

Career Placement & Development Services

Career placement and development services are available on all CPTC campuses/sites. Services are provided and assistance is available to students, graduates, and local employers with a variety of career-related services::

- Career Counseling
- Online Career Exploration Platform | Virtual Job Shadow
- Internet Career Search
- Career Services Seminars
- Placement Services
- Local and State Career-Related Websites
- Local Employment Services Providers

[Career Services Job Board](#)

Schedule an Appointment:

Student Affairs Director provides assistance to students, graduates, and local employers with a variety of career-related services.

Call 912-262-4993 to speak to someone regarding career services.

Federal Work-Study Program:

Federal Work-Study (FWS) is a work program for students through Coastal Pines Technical College funded by the federal government on and off-campus. FWS provides opportunities for students to earn money to help with financial needs while in school. Students may be eligible for up to 19 hours per week. The current pay rate for the FWS program is \$15 per hour.

Internet Career Search:

Assistance is provided utilizing internet career searches for current and former students to use in searching local, state, and national job markets.

Career Counseling:

Have you ever wondered how your aptitudes, talents, strengths, interests, and personality style match up with specific careers, education, training, and the job market? Career counseling is available to any potential or current student unsure of a program choice. Career inventories and/or assessments are available to discover career preferences. Program options and requirements may be discussed during the counseling session. The final program decision is up to the student. Assistance utilizing internet career searches is provided to current and former students when searching local, state and national job markets.

Career Services Seminars:

Career-related seminars and other activities are provided throughout the term. Information about upcoming seminars and activities is distributed to students through CPTC student e-mail accounts and is sent to program instructors. Popular seminars include Resume/Cover Letter Writing, Interviewing Skills, and Allied Health Careers. Faculty may request the Special Services Team or specific classroom presentations on career-related topics.

Placement Services:

The Student Affairs Director has contact with area employers on a regular basis. Job postings are forwarded to program instructors as job openings occur. Information regarding employment opportunities is also distributed to students through CPTC student e-mail accounts. Services are available to current students and recent graduates.

Voter Registration

Voter Registration Students in Georgia can register to vote online by visiting the Secretary of State's My Voter Page. Students who wish to register to vote on paper may pick up a voter registration card by contacting Coastal Pines Technical College's Student Activities Coordinator at specialservices@coastalpinetech.edu. Once the form is returned and completed, the Student Activities Coordinator will forward the form to the Secretary of State for processing. CPTC Student Government Association also sponsors a voter registration campaign in the Fall.

For information or questions, please contact Student Activities Coordinator at specialservices@coastalpinetech.edu.

Graduation/Commencement

Residence Requirements for Completion of Degree/ Diploma/Certificate

A student must complete at least 25% of his or her credit hours of a particular program of study at Coastal Pines Technical College in order to be awarded a technical certificate of credit, diploma or degree from Coastal Pines Technical College. Residence requirements of programs in some fields leading to licensure may exceed 25%.

Graduation/Commencement Requirements

Students must apply for graduation and meet all program requirements in order to receive their Award(s). The Graduation Grade Point average calculated includes only those courses required for graduation. When a course is taken more than once, the final or highest grade will be used in calculating the grade point average for graduation. A 2.0 grade point average is required for graduation and the student must be in good standing with the college. The letter grade of D (60-69) will be awarded if earned but will not satisfy graduation requirements.

There is no charge to receive a degree, diploma or certificate of credit; however, you must apply in order to have your award printed.

Commencement Ceremony Participation Fee

Students who sign up to participate in the Commencement ceremony at Coastal Pines Technical College will be charged a **\$40.00 non-refundable** participation fee to defray the expense of the ceremony. Caps and gowns are required for the ceremony and are ordered and distributed at rehearsal by the Student Affairs Office.

Students who do not participate in the ceremony are not charged a participation fee.

Honor Graduate

Student graduating with an Associate Degree or Diploma who has a graduation grade point average (GPA) equal to or in excess of 3.5 will be named an Honor Graduate and recognized during the Commencement Ceremony.

President's Scholar

Students graduating with an Associate Degree or Diploma who has a graduation grade point average (GPA) of 4.0 will be named a President's Scholar and recognized during the Commencement Ceremony.

Graduation Rate

Every postsecondary education institution is required by law to disclose its graduation rates annually. The 2023 graduation rate based on IPED's data for Coastal Pines Technical College is 79.8%. This graduation rate reflects only full-time, first-time postsecondary students who began classes in Fall 2022 through Summer 2022. Approximately 84.38% of the students at CPTC are part-time and not included in this graduation rate.

General Student Information

Library

The mission of the Coastal Pines Technical College Library is to provide library resource and services which support the academic, cultural, and life-long learning needs of our students, faculty, staff, and local communities. The collection of resources available include print and electronic books, audiovisuals, journals and periodicals, current newspapers, scholarly online databases, interlibrary loan and select ADA equipment. Reference assistance and library instruction/orientation is also available. Space may include areas for study and leisure reading, computer utilization including Internet access and printing, study rooms and/or conference rooms, and computer labs.

Online Library Orientation

The Online Library Orientation can be found on the Library Services page at <http://libguides.coastalpines.edu/libraryservices>

E-Mail

Coastal Pines Technical College Global e-mail is the official means of communication and is provided to CPTC students. Financial aid announcements, course announcements, online course information, student club information, emergency notifications and general CPTC student information are communicated to students through student global e-mail accounts. Students should check their e-mail daily to stay current.

Field Trips

Field trips can be an important component of a student's educational experience and the use of such out-of-classroom experiences is encouraged when appropriate. Students who participate in field trips are required to observe all applicable rules and procedures recorded in the CPTC Student Code of Conduct. Students who intend to participate in field trips are required to submit the following documents to their advisor or instructor upon request:

- Agreement to Abide by the Code of Conduct
- Assumption of Risk
- Limited Medical Authorization
- Release of Liability

Students who do not provide the above listed documents will not be approved to participate in field trips. Field trip activities must have prior approval by the appropriate departmental CPTC Vice President at least two business days prior to the date of the field trip.

News Releases/Publications

In promoting Coastal Pines Technical College, many times students' names and/or photos appear in news releases, videos, and publications. Students who wish to restrict the use of their names/pictures should contact the Office of Public Relations at (912) 287-6598.

Food and Beverages

Food and beverages may be consumed in designated areas only. Students are not allowed to eat in classrooms or laboratories. Upon approval of the class instructor, students may drink water in classrooms or laboratories. The water must be in a properly capped container that has been approved by the instructor.

Photo Identification

All students are required to have their student ID with them while on campus. Students must provide the ID when requested by school personnel. There is a fee for a replacement ID.

Children on Campus

Coastal Pines Technical College has established the following procedure concerning children on any Coastal Pines Technical College instructional sites:

- Children are not allowed on Coastal Pines Technical College instructional sites unless accompanied by an adult.
- Students are not allowed to bring children into classrooms/lab areas on Coastal Pines Technical College sites.
- Children are not allowed on Coastal Pines Technical College instructional sites for an extended period of time unless they are involved in an organized special program for children.
- Children must not be left unattended in waiting automobiles, hallways, snack bars, or outside buildings.
- Children who are not clients are not allowed in the Cosmetology Departments at any time. Prospective clients seeking appointments for services will be advised that services will be refused if accompanied by children. They will be further advised that children must not be left unattended in the areas listed above.

In the event children are found in class or wandering on Coastal Pines Technical College instructional sites, faculty and/or staff should ask the accompanying student to immediately leave Coastal Pines Technical College instructional sites with the child.

Parking Guidelines

1. All vehicles driven on Coastal Pines Technical College (CPTC) property by students, faculty, and staff may have a decal (either permanent or temporary).
2. All new students may obtain a parking permit (decal) during the first week of their college semester.
3. The parking decal may be prominently displayed on the exterior of the vehicle's rear windshield (driver side) and may be visible at all times while on college property.
4. Students driving more than one vehicle may receive an additional permit for each vehicle that will be parked on CPTC property.
5. Trucks, motorcycles, and mopeds must follow the same parking rules and procedures as cars.
6. Faculty, Staff, or Students may not park in the following locations:
 - Space reserved for CPTC Rick Perkins Instructor of the Year
 - Space reserved for CPTC GOAL Student of the Year
 - Space reserved for CPTC EAGLE Student of the Year
 - Spaces reserved for live work patrons such as cosmetology and automotive.
 - Fire lanes or driveways.
 - Handicapped spaces without a current, state-issued disability hangtag or license plate displayed in or on the vehicle (Driver of the vehicle must be the person for which the handicap permit is issued)
 - Instructional outdoor classroom/lab areas

Parking Decals

All students and employees may obtain and display a Coastal Pines Technical College parking decal. Parking decals can be obtained in the Student Affairs Office. Students, faculty, and staff attending or working at facilities not owned by CPTC will follow the parking procedures and rules of the host facility.

Tickets, Additional Decals, Fines and Penalties

A parking ticket may be issued to those who violate the above rules. Violations will result in fines as described below:

- \$ 10.00 - Parking in a fire lane or blocking the driveway
- \$ 5.00 - Parking in RESERVED

- \$ 50.00 - Parking in a HANDICAPPED space without a handicap permit

Paying Fines

1. Fines must be paid at the cashier's office within 14 calendar days from the date a ticket was issued, or an additional \$5 fine per violation will be imposed.
2. Continual violations will result in towing of the vehicle at the owner's expense and revocation of parking privileges.
3. Fines must be paid by the end of each semester. Unpaid fines will result in the student's records being placed on HOLD. Students on HOLD are not allowed to receive grades or transcripts, participate in graduation exercises, or register for the next term.
4. Written appeals for parking citations should be addressed to the CPTC Chief of Police within three business days of the violation. To file an appeal, you will need to complete the following form: [Appeal form](#). The result of an appeal will be communicated within seven business days in writing.

For additional questions, please contact Chief of Police, Ethan Johnson at (912) 287-4027 or email him at ejohnson@coastalpines.edu.

Student Dress Code

The purpose of the Student Dress Code is to ensure that students are aware of what type of dress is considered appropriate and what is expected of them. Coastal Pines Technical College (CPTC) simulates the business/ industrial environment. CPTC invites the community to tour the facilities, and community events are held at many of its sites, with this in mind, students should dress in an appropriate manner.

All clothing and uniforms will be suitable for specific laboratory, clinical, or industry-related activities of the student's chosen occupation; meet safety and health requirements for the occupation; and conform to commonly accepted standards of modesty and privacy. Each student's dress, grooming, and personal hygiene must be appropriate in the classrooms, laboratories, shop areas, and clinical sites. The supervising administrator shall determine if the particular mode of dress results in disruptions or interference.

Students shall not dress, groom, wear, or use emblems, insignias, badges, or other symbols or lewd or vulgar words where the effect thereof is offensive to a reasonable person or otherwise causes disruption or interference with the orderly operations of the college.

Dress requirements vary in classrooms, laboratories, and shop areas. Students enrolled in internships and clinical courses are required to dress appropriately according to the requirements of the work for which they are being trained.

Definitions of appropriate attires are listed below.

- **Business Attire:** Determined by the instructors of the business programs. Students in business-related classes may be required to dress in business attire for business dress days in reference to their work ethics lesson.
- **Clinical Attire:** Uniforms consist of scrub top and pants, uniform top and pants/skirts or dress uniform and closed toe shoes.
- **Industrial/Technical Attire:** Industrial/technical attire consists of long sleeve cotton denim shirts, jeans with no tears or holes and leather work boots for welding programs. Short- or long-sleeved shirts, jeans, trousers, and tennis shoes are acceptable. Shorts are not acceptable for industrial/technical classes with labs.

The Vice President for Student Affairs of CPTC may designate the dress code that is appropriate for particular events. All CPTC students are expected to abide by the Student Dress Code standards identified. If a student has a question or needs special accommodations relating to the Dress Code, the student should discuss the request with his/her instructor or program advisor first and if further clarification is needed, with the Vice President for Student Affairs. CPTC will make every effort to provide reasonable accommodations based on the student's request. Requests for medical or religious accommodations must be made in writing by completing the Student Request for Medical or Religious Accommodation(s) Form. After a discussion with his/her program advisor, the

Vice President for Student Affairs will approve, deny or recommend a modified accommodation based on the request. The Vice President for Student Affairs or designee will respond to the request within five (5) business days. The final approval will be submitted to the program advisor.

If any student does not meet the Dress Code standards, the student will be required to leave his/her respective campus and return dressed in appropriate attire. The student will be considered absent if the student misses a scheduled class due to violating the Student Dress Code. Violation of the student dress code procedure will result in appropriate corrective measures up to and including disciplinary action and will be reflected in the work ethics grade.

Students Acceptable and Unacceptable Dress Standards

Acceptable Apparel

- All shirts and dresses must have sleeves.
- Shorts unless such dress violates classroom/laboratory safety and health requirements. The length of the shorts, dresses, or skirts will be no shorter than two inches above the knee.
- Low rider pants, trousers, or other clothing must be worn in a manner that does not reveal under garments or expose bare skin below waistline.

Unacceptable Apparel

- Tank tops, tube tops, and shirts without sleeves
- Clothing that exposes areas of the stomach, side or back
- Pajama tops and /or bottoms
- Excessively tight-fitted clothing is not permitted
- Shirts/dresses that are see through, strapless, or expose cleavage (low cut) are not permitted
- Swimsuits

Acceptable Footwear

- Shoes should meet classroom/laboratory safety and health requirements and be appropriate for the occupation for which students are training.

Unacceptable Footwear

- Bare feet
- Bedroom slippers

Acceptable Headwear

- Hats and baseball caps
- Religious head covering is permitted when it does not interfere with the function or purpose of required occupational headgear.

Note: Individual programs may have additional dress code requirements.

Acceptable Computer and Internet Use

Coastal Pines Technical College, (CPTC) provides computer systems and Internet access for its students and employees. Employees utilizing College-provided Internet access are responsible for good behavior on-line just as they are in any other area of the college. This information applies to all CPTC employees, students, customers and anyone else who uses CPTC's information system and equipment, including but not limited to visitors. Any employee who violates this procedure will be subject to discipline up to and including dismissal. Violations of this procedure by other than employees or students will result in being banned from using CPTC equipment and may be handled legally. Using a computer without permission is theft of services and is illegal under state and federal laws. Federal law prohibits misuse of computer resources. In addition, the following specific computer crimes are prohibited by state law in Georgia (O.C.G.A. § 16-9-90 et seq.):

- Computer theft (including theft of computer services, intellectual property such as copyrighted material, and any other property);
- Computer trespass (unauthorized use of computers to delete or alter data or interfere with others' usage);
- Computer invasion of privacy (unauthorized access to financial or personal data or the like);
- Computer forgery (forgery as defined by other laws, but committed on a computer rather than on paper);
- Computer password disclosure (unauthorized disclosure of a password resulting in damages exceeding \$500 - in practice, this includes any disclosure that requires a system security audit afterward); and
- Misleading transmittal of names or trademarks (falsely identifying yourself or falsely claiming to speak for a person or organization by using their name, trademark, logo, or seal).

Maximum penalties for the first four crimes in the list are a \$50,000 fine and 15 years of imprisonment, plus civil liability. The maximum penalties for computer password disclosure are a \$5,000 fine and 1 year of imprisonment, plus civil liability.

The purpose of CPTC-provided Internet access is to facilitate communications in support of research and education. To remain eligible as users, students' use must be in support of and consistent with the educational objectives of the College. Access is a privilege, not a right. Users should not expect files stored on CPTC-based computers to be private. Electronic messages and files stored on CPTC-based computers shall be treated like other CPTC property that is temporarily assigned for individual use. Administrators may review files and messages in an effort to maintain system integrity and in an effort to insure that users are acting responsibly.

Moreover, CPTC officials shall cooperate with law enforcement officials who are properly authorized to search CPTC computers and computer systems.

All information created, stored or transmitted by CPTC computers or networks is subject to monitoring for compliance with applicable laws and procedures.

The following uses of Coastal Pines Technical College-provided computers, networks and Internet access are not permitted:

- To create, access or transmit sexually explicit, obscene, or pornographic material;
- To create, access or transmit material that could be considered discriminatory, offensive, threatening, harassing, intimidating, or attempts to libel or otherwise defame any person.
- To violate any local, state or federal statute;
- To vandalize, damage, or disable the property of another individual or organization;
- To access another individual's password, materials, information, or files without permission;
- To violate copyright or otherwise use the intellectual property of another individual or organization in violation of the law, including software piracy;
- To conduct private or personal for-profit activities; this includes use for private purposes such as business transactions, private advertising of products or services, and any activity meant to foster personal gain;
- To knowingly endanger the security of any CPTC computer or network;
- To willfully interfere with another's authorized computer usage;
- To connect any computer to any of the CPTC networks unless it meets technical and security standards set by the College;
- To create, install, or knowingly distribute any malware such as a computer virus, "Trojan horse," rootkit, keylogger, or other surreptitiously destructive program on any CPTC computer or network facility, regardless of whether any demonstrable harm results; and
- To modify or reconfigure the software or hardware of any agency computer or Network without proper authorization;
- To conduct unauthorized not-for-profit business activities;
- To conduct any activity or solicitation for political or religious causes;
- To perform any activity that could cause the loss, corruption of, prevention of rightful access to, or unauthorized distribution of Agency data and information; and
- To create, access, or participate in online gambling. Occasional access to information or websites of the Georgia Lottery Corporation shall not constitute nor be considered inappropriate use.
- To capture and or record network traffic without authorization.

Occasional personal use of Internet connectivity and e-mail that do not involve any inappropriate use as described above may occur, if permitted by the College. Any such use should be brief, infrequent, and shall not interfere with User's performance, duties and responsibilities. Users of CPTC computers and computer systems are subject to CPTC's procedure on the development of Intellectual Property. Any violation of this procedure and rules may result in disciplinary action against the employee or student. When and where applicable, law enforcement agencies may be involved.

CPTC makes no warranties of any kind, either express or implied, for the computers, computer systems and Internet access it provides. CPTC shall not be responsible for any damages users suffer, including but not limited to loss of data resulting from delays or interruptions in service. CPTC shall not be responsible for the accuracy, nature or quality of information gathered through CPTC hard drives or servers; nor for the accuracy, nature or quality of information gathered through College-provided Internet access.

CPTC shall not be responsible for personal property used such as laptops, tablets, smartphones, etc. to access its computers or networks or for CPTC provided Internet access. CPTC shall not be responsible for unauthorized financial obligations resulting from CPTC-provided access to the Internet.

The foregoing standards are equally applicable to employees of the TCSG, wherever housed, and to employees and students of CPTC.

Penalties Violations of these procedures incur the same types of disciplinary measures as violations of other CPTC procedures or state or federal laws, including criminal prosecution.

Software Piracy

Software piracy is illegal and grounds for disciplinary action up to and including dismissal of employees who have illegally copied software. Penalties for illegally copying software are severe. According to the Business Software Alliance website:

Penalties for Illegal Software

Infringement of copyright may constitute a criminal offense, exposing individuals and companies to substantial penalties and in the case of individuals, even imprisonment.

Criminal Penalties

Under the Copyright Act, making an infringing copy of software with the intention of obtaining a commercial advantage or profit and if the person knows or ought reasonably to know that the copy is infringing copyright and is now a criminal offense. Offenders may be liable for:

- Fines up to \$93,500 and /or up to five years imprisonment for individuals
- Fines up to \$467,500 and/or up to five years imprisonment for companies.

Civil Penalties

Making or using illegal copies of software for your personal use or at work is a civil offense under the Copyright Act and offenders are liable for:

- Damages of an unlimited amount (determined by the Court)
- Court costs in many circumstances, which can also be substantial.

It does not make any difference who loads the software. For example, if an employee loads personal software on a CPTC computer and then the software is copied by others at the College, the College is liable even though it was unaware of the activity. Any software on CPTC-owned computers including laptops, tablets, and smartphones used at home, in a classroom or in an office for which Coastal Pines Technical College does not have a license must be removed immediately. This is an excerpt from the Business Software Alliance website.

Many businesses, both large and small, face serious legal risks because of software piracy. Under the law, a company can be held liable for its employees' actions. If an employee is installing unauthorized software copies on company computers or acquiring illegal software through the Internet, the company can be sued for copyright infringement. This is true even if the company's management was unaware of the employee's actions.

Ownership of Intellectual Property

Coastal Pines Technical College encourages the development, writing, invention, or production of intellectual property designed to improve the productivity of the college or to enhance the teaching/learning environment. In order that the college may fully utilize all works produced for and provided for its use, an employee or student producing work for the college or its use represents and warrants that such works:

- Do not violate any law;
- Do not violate or infringe any intellectual property right of any person or firm (including right of publicity); and
- Do not libel, defame, or invade the privacy of any person or firm.

Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Intellectual property includes, but is not limited to, materials which may be copyrighted, patented, and/or trademarked.

Ownership

Unless otherwise provided in a separate agreement, the college owns all rights to a copyrightable or patentable work created by the employee or student with the support of college resources. Ownership refers to a legally binding agreement specifying the names, party, or parties to whom the intellectual property belongs and who will be attributed as the owners of the intellectual property in the general public. College resources include, but are not limited to, offices, computers, standard office equipment and supplies, libraries, labs, funds, and personnel.

Ownership resides with the employee or student if all of the following criteria are met:

- The work is the result of individual initiative, not requested or required by the college;
- The work is not the product of a specific contract or assignment made as a result of employment or enrollment with the college;
- The work is not prepared within the scope of the employee's job duties or course/program requirements;
- The work is not completed using equipment or resources provided by the college.

Ownership resides with the college if any of the above criteria are not met and/or if any of the following criteria applies:

- The work is prepared within the scope of the employee's job duties or course/program requirements;
- The work is the product of a specific contract or assignment made in the course of the employee's employment or student's enrollment with the college;
- The development of the work involved facilities, time, and/or other resources of the college including, but not limited to, release time, grant funds, college personnel, salary supplement, leave with pay, equipment, or other materials or financial assistance.

Any employee or student of Coastal Pines Technical College must obtain the express written approval of the president prior to the development of intellectual property if there is any question pertaining to ownership.

Copyrighted Material

Literary works, textbooks, works of art, maps, computer software, musical and dramatic works, motion pictures and sound recordings, and other original works of authorship may be copyrighted. In order to be covered by copyright laws, the work must be in some tangible form, and it must be the product of original creative authorship. Ownership of copyrightable works must be consistent with the United States Copyright Law. The burden of obtaining the copyright, patent, license, and/or trade secret rights, including cost, is that of the owner.

Revenue

Revenues derived from the development and creation of college-owned intellectual property are distributed to college revenue funds as determined by the president. In the event that intellectual property is licensed to the originator, the full rights for the copyright, patent, or trademark, and any resulting royalties or profits, shall remain with the originator.

All cases, in which questions arise as to the equities, rights division of revenues, or any other intellectual property-related matter, shall be referred to the College Council for consideration, interpretation of procedure, and decision. Appeal of the decision shall be to the Vice President for Administrative Services, then to the President, and finally to the Technical College System of Georgia (TCSG). Appeals within the college must be made in writing within 30 days of written notice of a final decision. Appeals to the TCSG shall be made in accordance with State Board policy.

Campus Safety & Security

College Security Statistics

As required by the Higher Education Act, the Coastal Pines Technical College Police Chief must report required College crime statistics annually. Summary reports are posted on the Department of Education website and on the CPTC website made available to faculty, staff, and the community. The report also contains procedures for crime reporting, general security, sexual assault policy, drug and alcohol policy including Georgia state laws and health risks of drug/alcohol use, weapons policy and the most recent report in compliance with the Campus Crime Statistics Act.

Campus Safety & Security Contact Information

Safety precautions for the College are posted and announced in common areas, labs, and classrooms. Students are not to use any equipment except under the supervision of the instructor and then only after safety precautions have been explained and demonstrated. Any student willfully disobeying safety signs, regulations, or warnings from instructors is subject to immediate dismissal.

Coastal Pines Technical College is committed to a safe educational environment for students and a safe working environment for faculty and other staff. For details, see CPTC Emergency Operations Plan.

CPTC has an officer on site or who monitors site activity via video surveillance during the hours students occupy the buildings.

For an emergency requiring immediate assistance: Call 911

For non-emergency assistance:

Alma	912-632-0951
Baxley	912-367-1700
Camden	912-510-3300
Golden Isles	912-424-9405
Hazlehurst	912-379-0041
Jesup	912-424-9403
Waycross	912-424-9410

Any student who desires an escort to their vehicle in a CPTC parking area should contact the front desk, officer or an instructor for assistance. Escorts will be considered on a case-by-case basis.

Crime Awareness and Reporting

Any student or employee witnessing or being subject to any criminal act on campus or off-campus instructional site must report the incident immediately to the Security/Police Officer on duty. In the absence of a Security/Police Officer the incident must be reported to any available Vice President or supervisor.

Local authorities will be contacted and advised of any incident reported which involves a criminal action occurring on the College campus or off-campus instructional site. Coastal Pines Technical College facilities are accessible for staff, students, and visitors during regularly scheduled hours, which may vary by location. The College is also open on weekends occasionally for special functions. Coastal Pines Technical College does not have campus residences.

All crimes will be reported immediately and accurately to the College Police Chief and appropriate law enforcement agencies. Coastal Pines Technical College works closely with state and local police and law enforcement agencies in reporting all known campus crime.

Emergency Procedures

Emergency evacuation routes and procedures are posted in each area. In emergency situations, specific evacuation and emergency response procedures will be provided by the classroom instructor.

Emergency Closing

The College retains the right to alter the business and class hours if conditions exist that may threaten the health, safety, or welfare of students and personnel. Every effort will be made in such cases to notify students and personnel, as appropriate. Such changes will be announced by website, email, text, major television and radio stations.

Alertus

Alertus is used to send emergency communications and other important information via text message and email.

Employees and students enrolled in certificate, diploma and/or Degree programs are automatically added each semester. Alertus accounts may be accessed by clicking [here](#).

Student Login: Code: cptc_students Pin: 58754

Faculty/Staff Login: Code: cptc_staff Pin: 4d871.

If the user does not know or remember their password, please click on the link provided and "Follow the steps for forgot your password?"

Adult Education and Continuing Education students may request to be added to the system to receive Alertus Alerts click [here](#).

Tobacco Usage

In an effort to provide a healthier and cleaner environment for students, employees and visitors, the Coastal Pines Technical College (CPTC) main campus and all off-campus instructional sites are tobacco-free. The use of tobacco products (including, but not limited to, cigarettes, electronic cigarettes, personal vaporizers, electronic nicotine delivery systems, cigars, pipes, and smokeless tobacco) is prohibited inside and outside all buildings, parking lots, commons areas, and within any college vehicle or any vehicle operated by the College. This procedure applies to students, employees, and visitors.

The monitoring and enforcement of the tobacco-free campus procedure is the responsibility of all CPTC faculty, staff, and students.

Students

Students are expected to comply with the Tobacco-Free Campus Procedure. A fine of \$15.00 will be assessed each time a student is witnessed violating the procedure on Coastal Pines Technical College grounds. Failure to pay a fine will result in a hold placed on student's accounts. Habitual violators could face disciplinary sanctions issued by the college that could result in suspension or expulsion.

Faculty and Staff

Coastal Pines Technical College has the right to prohibit the use of tobacco products on its property. Those employees who use tobacco products do not have the right to violate this procedure. An employee who fails to comply with this procedure will be subject to positive discipline procedures of the Technical College System of Georgia. Non-compliance should be reported to the employee's supervisor. Many cessation or other educational intervention resources are available for use by employees and may be recommended or required by the employee's supervisor.

Personnel Renting/Using Grounds or Facilities

Coastal Pines Technical College has the right to prohibit the use of tobacco products on its property. Personnel renting/using the grounds/facilities do not have the right to violate this procedure. Contract agreements with such personnel may be terminated or not renewed.

While on institutional grounds, which includes school-sponsored activities, institutional vehicles, and clinical affiliates, a student shall not possess, sell, use, transmit, or be under the influence of any narcotic drug, a hallucinogenic drug, amphetamine, barbiturate, marijuana, alcoholic beverage, or intoxicant of any kind. The unlawful possession, use, or distribution of illicit drugs and alcohol on college premises, in any facility, or at any function of Coastal Pines Technical College (CPTC) is prohibited and may be considered sufficient grounds for serious punitive action, including expulsion, and may be punishable by local, state, and federal law, which may include a fine, prison term, or both.

CPTC will impose sanctions on students that violate institutional procedure on unlawful possession, use, or distribution of illicit drugs and alcohol by (1) temporary or permanent dismissal and (2) referral for prosecution. Note: The use of a drug as prescribed by a medical prescription written specifically for the user by a registered medical practitioner shall not be considered a violation of this rule.

Disciplinary sanctions for students convicted of a felony offense involving alcohol or the manufacture, distribution, sale, possession, or use of marijuana, controlled substances, or other illegal or dangerous drugs shall be immediate suspension and denial of further state and/or federal funds from the date of conviction. Specifically, in the case of a drug-related offense, the student shall minimally be suspended for the remainder of the semester and forfeit all academic credit for that period.

CPTC shall notify the appropriate state/federal funding agency within 10 days after receiving notice of the conviction from the student or otherwise after receiving the actual notice of conviction.

Within 30 days of notification of conviction, CPTC shall with respect to any student so convicted:

- Take additional appropriate action against such student up to and including expulsion as it deems necessary.
- Provide such student with a description of any drug or alcohol counseling treatment, rehabilitation, or re-entry programs that are available for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

CPTC shall conduct a biennial review of its program to determine its effectiveness and implement changes to the program if they are needed and ensure that the sanctions required by the program are consistently enforced.

Health Risks

Health risks associated with the use of illicit drugs and/or the abuse of alcohol include but are not necessarily limited to: addiction/dependence, heart disorders, cancer, respiratory disorders, liver damage, brain damage, kidney damage, mental/social/emotional problems, intestinal disorders, AIDS, endocarditis, hepatitis, hallucination, impaired perception, paralysis, restlessness, insomnia, anxiety, birth defects, behavioral problems, jaundice, convulsions, coma, and possible death.

Referrals

Mayo Clinic Health Systems, Waycross	912-283-3030
Greenleaf Center, Inc. – Valdosta	800-247-2747
St. Simons By the Sea	8000-821-7224 or 800-234-0420
Georgia Drug and Alcohol Abuse Helpline	800-338-6745
Georgia Crisis and Access Line	800-715-4225
Federal Substance Abuse and Treatment	800-662-4347
National Alcohol and Drug Information and Referrals	800-252-6465, #5

Firearms, Weapons and Explosives

Coastal Pines Technical College (CPTC) is committed to providing all employees, students, volunteers, visitors, vendors and contractors a safe and secure workplace and/or academic setting by expressly restricted the possession of a firearm, weapon, or explosive compound/material on any technical college campus (including all satellite campuses/off-site work units), within the designated school safety zone, or at any technical college sanctioned function in a manner contrary to state or federal law.

It is restricted for any student or employee of Coastal Pines Technical College (CPTC) to bring on campus, possess, or have under such person's control, any explosive compound, firearm or weapon designed for the purpose of offense or defense while working or participating in any function on the College's premise or any off-campus College sponsored activity.

This procedure specifically excludes any of these objects used for classroom work authorized by a teacher/instructor; any person employed as a campus police officer/security officer who is authorized to carry a weapon pursuant to Chapter 8 of Title 20; or, any person (e.g., maintenance staff) authorized in writing by the President of CPTC or his/her designee to have in his/her possession for use as a part of any activity conducted at any CPTC workplace a weapon which would otherwise be prohibited by this procedure. The authorization shall specify the weapon(s) which have been authorized and the time period during which the authorization is valid.

Any employee who violates the provisions of this procedure shall be subject to disciplinary action up to and including dismissal as well as possible criminal prosecution.

Any technical college student who violates the provisions of this procedure shall be subject to disciplinary action up to and including expulsion consistent with guidelines of CPTC's Student Code of Conduct as well as possible criminal prosecution.

Any volunteer or visitor who violates the provisions of this procedure shall be subject to criminal prosecution.

Any vendor or contractor who violates the provisions of this procedure shall be subject to the termination of his/her business relationship with CPTC as well as possible criminal prosecution.

Coastal Pines Technical College will:

1. Post signage to inform those that enter CPTC property and/or off-site work locations that firearms, weapons, and unlawful explosive compounds are restricted.
2. Develop procedures to inform employees, students, volunteers, visitors, vendors, and contractors of the following:
 - a. the implications of Georgia law restricts firearms, weapons, and unlawful explosive compounds on college property, at off-site work locations, or at college sponsored//sanctioned functions,
 - b. possible penalties associated with violations of this procedure; and,
 - c. reporting procedures to notify appropriate law enforcement agencies of a potential violation.

Definitions

Contractor: an independent contractor, business, or corporation which provides goods and/or services to the Technical College System of Georgia or any associated technical college under the terms specified in a contract. For the purposes of this procedure, the term also includes all employees of a business or corporation working on technical college property or at a technical college workplace including any sanctioned event.

School Safety Zone: any technical college campus, satellite campus, or other designated worksite.

Explosive Compound: any bomb or explosive, chemical, or biological material referenced in the Official Code of Georgia, O.C.G.A. 16-7-81.

Firearm: includes, any operable or inoperable pistol, revolver, or any weapon designed or intended to propel a missile of any kind as defined in O.C.G.A. 16-11-27-1, or a machine gun, shotgun, sawed-off shotgun, sawed-off rifle, dangerous weapon or silencer as defined in O.C.G.A. 16-11-121.

Weapon: any operable or inoperable object (or reasonable facsimile thereof) referenced in O.C.G.A. 16-11-127.1., including but not limited to any knife with a blade two or more inches in length (e.g., switchblade, ballistic knife, etc.), straight-edge razor or razor blade, any bludgeon-type instrument (e.g., blackjack, bat or

club), any flailing instrument (e.g., nun chuck or fighting chain) or weapon designed to be thrown (e.g., throwing star or oriental dart).

Note: This statute specifically excludes any of these objects used for classroom work authorized by a teacher/instructor; any person employed as a campus police officer/security officer who is authorized to carry a weapon pursuant to Chapter 8 of Title 20; or, any person (e.g., maintenance staff, student, or otherwise) authorized in writing by a duly authorized college official (e.g., President or his/her designee) to have in his/her possession for use as a part of any activity conducted at any technical college workplace a weapon which would otherwise be prohibited by this Code section. The authorization shall specify the weapon(s) which have been authorized and the time period during which the authorization is valid.

Workplace: The CPTC campus, a satellite or off-site work location, or any college sponsored/sanctioned function.

It is unlawful for any person to carry, possess, or have under such person's control any firearm, weapon, or unlawful explosive compound while within a school safety zone; at a CPTC facility, on CPTC property, or at a CPTC-sanctioned function; or, on a bus or other transportation furnished by the college. Note: this prohibition does not extend to a peace officer as defined by O.C.G.A. 35-8-2 when the individual is acting in the performance of his/her official duties or when en route to or from his/her official duties.

It is an express violation of procedure for any individual to use, possess, manufacture, distribute, maintain, transport, or receive any of the following on any technical college campus, any satellite or off-site work location, or any college sanctioned function:

1. Any firearm or weapon whether operable or inoperable as defined in O.C.G.A. 16-11-127.1 or any facsimile thereof, including, but not limited to paintball guns, BB guns, potato guns, air soft guns, or any device that propels a projectile of any kind;
2. Any dangerous weapon, machine gun, sawed-off shotgun or rifle, shotgun or silencer as defined in O.C.G.A. 16-11-121;
3. Any bacteriological weapon, biological weapon, destructive device, detonator, explosive, incendiary, or over-pressure device, or poison gas as defined in O.C.G.A. 16-7-80.
4. Any explosive compound/material defined in O.C.G.A. 16-7-81; or,
5. Any hoax device, replica of a destructive device or configuration of explosive materials with the appearance of a destructive device, including, but not limited to, fake bombs, packages containing substances with the appearance of chemical explosives or toxic materials.

Signage is posted on the CPTC campuses notifying those that enter its property and/or off-site work locations that firearms, weapons, and unlawful explosive compounds are restricted.

Workplace Violence

The Technical College System of Georgia (TCSG) and Coastal Pines Technical College are committed to providing all employees, students, volunteers, visitors, vendors and contractors a safe and secure workplace and/or academic setting free of intimidating, threatening, or violent behavior. Specifically, violent acts, threats (direct or implied), unlawful harassment, verbal or physical abuse, stalking, intimidation, and other disruptive behavior, language or communication in any form (including by telephone, facsimile electronic mail, written communication or social media) are expressly prohibited.

No employee, student, volunteer, visitor, vendor, or contractor shall engage in prohibited behavior or conduct against another individual at CPTC (including a satellite campus/location) or at any sanctioned off-site function.

A student, who believes that he/she has been subject to workplace violence should report the matter immediately to a CPTC administrator or Police Chief via an electronic version of the Workplace Violence Incident Reporting Form located on the CPTC website.

Any CPTC student who engages in prohibited behavior shall be subject to disciplinary action up to and including expulsion consistent with the provisions/guidelines of CPTC's Student Code of Conduct.

Examples of prohibited behavior include, but are not limited to:

- physically menacing/threatening behavior or gestures which convey a threat. NOTE: threats of violence will not be excused on the grounds that they were made in "jest" or in a "joking" manner.
- unlawful harassment, including ethnic, racial, or sexual epithets;
- physical attack/assault with or without a weapon;
- fighting and/or physical altercations, including any "fighting" that may be characterized as "horseplay";
- stalking;
- direct or implied verbal threats or abusive, intimidating, or obscene language;
- intentional damage to TCSG property;
- intentional damage to the personal property of an employee, student, volunteers, visitor, vendor, or contractor; or,
- possession of a weapon on technical college property when such possession violates the provisions of O.C.G.A. § 16-11-127.1 and State Board Policy 3.3.10.

Students should remain alert to and be familiar with their surroundings to better recognize potentially serious situations. Many acts of targeted workplace violence are preceded by direct or indirect threats; therefore, all threats must be taken seriously and should be reported as soon as possible.

Any complaint registered against a CPTC student regarding a potential violation of this procedure will be investigated consistent with the provisions of CPTC's Student Disciplinary Procedure. Procedure 4.3.3p (III.X.): Workplace Violence may be accessed at https://tcsgeu.edu/tcsgpolicy/tcsg_policy_manual.pdf.

Student Code of Behavior/Grievances

Student Rights and Responsibilities

Enrollment as a student at Coastal Pines Technical College (CPTC) carries with it certain responsibilities as well as certain rights and privileges. CPTC promotes a climate of academic honesty, critical investigation, strong work ethic, intellectual freedom and freedom of individual thoughts and expression consistent with the rights of others.

Students have the following rights:

1. To be admitted to CPTC without discrimination in any respect.
2. To be in an atmosphere that is conducive to learning and to attend CPTC 's educational programs, course offerings, and activities on campus or any activity sponsored by CPTC off campus in accordance with procedures.
3. To obtain the necessary knowledge, skills, and abilities, in order to gain initial employment, maintain advanced levels of competence or acquire new levels of competence by participating in programs, course offerings, and activities in accordance with CPTC procedures.
4. To develop intellectual, personal, and social values.
5. To see their records and, if necessary, challenge their accuracy.
6. To participate in college approved student organizations in accordance with CPTC procedures.
7. To due process procedures.
8. To pursue grievances against instructors, administrators, or fellow students.
9. To have academic and disciplinary records kept confidential subject to existing laws. No official records of students are available to unauthorized persons without the expressed written consent of the student involved except under legal compulsion.
10. To be informed of student's right-to-know information required by federal requirements.

Students have the following responsibilities:

1. To attend class regularly and on time.
2. To be acquainted with the published CPTC procedures and comply with them as well as federal and state laws.
3. Treat others with courtesy and respect.
4. Demonstrate personal and academic integrity in dealing with others.
5. Make positive contributions to the multicultural, multiracial environment at the College.
6. Share responsibility for maintaining the integrity of the physical surroundings

Student Code of Conduct

Coastal Pines Technical College provides opportunities for intellectual, emotional, social, and physical growth. Technical college students assume an obligation to act in a manner compatible with the fulfillment of its mission. The technical college community recognizes its responsibility to provide an atmosphere conducive to growth. With these principles in mind, Coastal Pines Technical College establishes this Student Code of Conduct.

(Summary of the CPTC Procedure: Student Conduct Code. Complete Procedure may be accessed at http://www.coastalpinetech.edu/assets/1/7/CPTC_Student_Conduct_Code_Procedure.pdf).

Conduct Rules and Regulations

Proscribed Conduct

Any student found to have committed any of the following types of misconduct is subject to the disciplinary sanctions outlined in the Student Disciplinary Policy and Procedure.

A. ACADEMIC

Academic Misconduct Definitions

Academic Misconduct includes, but is not limited to, the following:

1. Aiding and Abetting Academic Misconduct
 - Knowingly helping, procuring, encouraging, or otherwise assisting another person to engage in academic misconduct.
2. Cheating
 - Use and/or possession of unauthorized material or technology during an examination, or any other written or oral work submitted for evaluation and/or a grade, such as tape cassettes, notes, tests, calculators, computer programs, cell phones, and/or smartphones, or other electronic devices.
 - Obtaining assistance with or answers to an examination or any other written or oral work submitted for evaluation and/or a grade from another person, with or without that person's knowledge.
 - Furnishing assistance with or answers to an examination or any other written or oral work submitted for evaluation and/or a grade to another person.
 - Possessing, using, distributing, or selling unauthorized copies of an examination, computer program, or any other written or oral work submitted for evaluation and/or a grade.
 - Representing as one's own an examination or any other written or oral work submitted for evaluation and/or a grade created by another person.
 - Taking an examination or any other written or oral work submitted for evaluation and/or a grade in place of another person.
 - Obtaining unauthorized access to the computer files of another person or agency and/or altering or destroying those files.
 - Obtaining teacher edition textbooks, test banks, or other instructional materials that are only intended to be accessed by technical college officials, college administrator or faculty member.
3. Fabrication
 - The falsification of any information or citation in an examination or any other written or oral work submitted for evaluation and/or a grade.
4. Plagiarism
 - Submitting another's published or unpublished work in whole, in part or in paraphrase, as one's own without fully and properly crediting the author with footnotes, quotation marks, citations, or bibliographical reference.
 - Submitting as one's own original work, material obtained from an individual or agency without reference to the person or agency as the source of the material.
 - Submitting as one's own original work material that has been produced through unacknowledged collaboration with others without release in writing from collaborators.

B. NON-ACADEMIC MISCONDUCT

Non-Academic Misconduct includes, but is not limited to, the following:

1. Behavior
 - **Indecent Conduct:** Disorderly, lewd or indecent conduct, including public physical or verbal actions; language commonly considered offensive (not limited to, but including profanity); or distribution of obscene or libelous written or electronic material.
 - **Violence:** physical abuse of any person (including dating violence, or sex violence) on technical college Premises or at technical college-sponsored or technical college-supervised functions, including physical actions which threaten or endanger the health or safety of any such persons. This includes fighting and/or other disruptive behavior, which includes any action or threat of violence

which endangers the peace, safety, or orderly function of the technical college, its facilities, or persons engaged in the business of the technical college. Note: certain physical abuse may also be considered unlawful harassment.

- **Harassment:** Coastal Pines Technical College prohibits unlawful conduct based on race, color, creed, national or ethnic origin, gender, religion, disability, age, genetic information, political affirmation or belief, disabled veteran, veteran of the Vietnam Era or citizenship status addressed directly to any individual or group that has the purpose or effect of unreasonably and objectively interfering with that individual or group's: (1) performance, (2) work or educational environment or (3) ability to participate in an educational program or activity. The College also prohibits stalking, or other behavior that objectively and unreasonably interferes with another's legal rights or creates an objectively intimidating, hostile, or offensive environment. (This also includes the display of or navigation to pornography and other inappropriate websites and materials, and inappropriate behavior on social media and/or networking applications.) Impermissible harassment may include verbal, non-verbal, and/or physical conduct.
- **Disruption:** prohibits activities not otherwise protected by law including the First Amendment to the Constitution of the United States of America, which intentionally obstruct or interrupt teaching, research, administration, disciplinary proceedings or other technical college activities, including public service functions, and other duly authorized activities on technical college Premises or at technical college-sponsored activity sites.
- **Failure to Comply:** Failure to comply with lawful directions of technical college officials and/or failure to identify oneself to these persons when requested to do so.
- **Hazing:** Any intentional, knowing or reckless act committed by a person (whether individually or in concert with other persons) against another person or persons regardless of the willingness of such other person or persons to participate, that (1) is committed in the course of an initiation into, an affiliation with or the maintenance of membership in, a student organization; and (2) causes or creates a risk, above the reasonable risk encountered in the course of participation in the College or the organization (such as the physical preparation necessary for participation in an athletic team) of physical or psychological injury including:
 - whipping, beating, striking, electronic shocking, placing of a harmful substance on someone's body, or similar activity;
 - causing, coercing, or otherwise inducing sleep deprivation, exposure to the elements, confinement in a small space, extreme calisthenics, or other similar activity;
 - causing, coercing, or otherwise inducing another person to consume food, liquid, alcohol, drugs, or other substances;
 - causing, coercing, or otherwise inducing another person to perform sexual acts;
 - any activity that places another person in reasonable fear of bodily harm through the use of threatening words or conduct;
 - any activity against another person that includes a criminal violation of local, State, Tribal, or Federal law; and
 - any activity that induces, causes, or requires another person to perform a duty or task that involves a criminal violation of local, State, Tribal, or Federal law.

2. Professionalism

- **Personal Appearance:** Students are expected to always maintain proper personal appearance. Attire and grooming should be appropriate for the occupational area in which the student is training. Appropriate is what one normally would wear on a job in the specific area of training. Any attire considered unsafe or disruptive to the class will not be allowed. Students inappropriately dressed or dressed in a manner that could present a safety hazard will not be allowed to attend class. Students are expected to practice good personal hygiene. These requirements are designed to instill in each student a sense of order and respect for himself/herself, other students, and the faculty.
- Refer to the Coastal Pines Technical College [Student Dress Code Procedure](#)

3. Use of Technical College Property

- **Theft and Damage:** prohibits theft of, misuse of, or harm to technical college property, or theft of or damage to property of a member of the technical college community or a campus visitor on technical college Premises or at a technical college function.
- **Occupation or Seizure:** illegal occupation or seizure in any manner of technical college property, a technical college Premises, or any portion thereof for a use inconsistent with prescribed, customary, or authorized use.

- Presence on Technical College premises: prohibits unauthorized entry upon technical college premises; unauthorized entry into technical college premises or a portion thereof which has been restricted in use; unauthorized presence in technical college premises after closing hours; or furnishing false information to gain entry upon technical college premises.
 - Assembly: prohibits participation in or conducting an unauthorized gathering that objectively threatens or causes injury to person or property or that interferes with free access to technical college facilities or that is unprotected by the First Amendment to the Constitution of the United States of America and objectively harmful, obstructive, or disruptive to the educational process or functions of the technical college.
 - Fire Alarms: prohibits setting off a fire alarm or using or tampering with any fire safety equipment on technical college Premises or at technical college-sponsored activity sites, except with reasonable belief in the need for such alarm or equipment. In the event of a fire alarm sounding, students must evacuate the building unless otherwise directed by a technical college official.
 - Obstruction: prohibits obstruction of the free flow of pedestrian or vehicular traffic on technical college Premises or at technical college sponsored or supervised functions.
 - Refer to Coastal Pines Technical College [Parking: Procedures and Rules](#)
4. Drugs, Alcohol and Other Substances
- Substances referred to under this policy include all illegal drugs, alcoholic beverages, and misused legal drugs (both prescription and over-the-counter).
- Alcohol: Students must comply with all state and federal laws regulating alcohol as well as TCSG Policy 3.3.6, Alcohol on Campus. Alcoholic beverages may not be served or sold at any student sponsored function. Students being in a state of intoxication on technical college Premises or at technical college-sponsored or supervised functions (including off-campus functions), internships, externships, practicum, clinical sites, cooperative or academic sponsored programs or activities or in a technical college-owned vehicle is prohibited.
 - Controlled substances, illegal drugs and drug paraphernalia: The technical college prohibits possession, use, sale, or distribution of any controlled substance, illegal drugs, or drug paraphernalia except as expressly permitted by law. Any influence which may be attributed to the use of drugs or of alcoholic beverages shall not in any way limit the responsibility of the individual for the conduct or consequences of his/her actions.
 - Food: The technical college prohibits eating and/or drinking in classrooms, shops, and labs or other unauthorized areas on technical college Premises, unless otherwise permitted by technical college officials.
 - Smoking/Tobacco: The technical college prohibits smoking, or using other forms of electronic, alternative smoking devices or other forms of tobacco products in classrooms, shops, and labs or other unauthorized areas on technical college Premises. Refer to the CPTC Procedure: [Tobacco Free Campus](#).
5. Use of Technology
- Damage and Destruction: Destruction of or harm to equipment, software, or data belonging to the technical college or to others is considered unacceptable usage. This may include altering, downloading, or installing software on technical college computers, tampering with computer hardware or software configuration, improper access to the technical college's network, and disconnection of technical college computers or devices.
 - Electronic Devices: Unless otherwise permitted by technical college officials, the technical college prohibits use of electronic devices in classrooms, labs, and other instructional, event, or affiliated facilities on technical college Premises. Such devices include, but are not limited to cell phones, beepers, walkie talkies, cameras, gaming devices, and other electronic devices, which may cause unnecessary disruption to the teaching/learning process on campus. Coastal Pines Technical College also prohibits attaching personal electronic devices to college computers under any circumstances.
 - Harassment: Coastal Pines Technical College prohibits the use of computer technology objectively interfere with another's legal right to be free from harassment based on that individual's race, color, creed, genetic information, national or ethnic origin, gender, religion, disability, age, political affirmation or belief, disabled veteran, veteran of the Vietnam Era or citizenship status.
 - Unacceptable Use: Use of computing facilities to interfere with the work of another student, faculty member or technical college official. This includes the unauthorized use of another individual's identification and password.
- Coastal Pines Technical College prohibits any additional violation to the CPTC Procedure: Acceptable Computer and Internet Use.

6. Weapons

Coastal Pines Technical College and the Technical College System of Georgia is committed to providing all employees, students, volunteers, visitors, vendors and contractors a safe and secure workplace and/or academic setting. The possession, carrying, or transportation of a firearm, weapon, or explosive compound/material in or on college building or property shall be governed by Georgia state law. All individuals are expected to comply with the related laws. Failure to follow laws pertaining to weapons is considered a violation of the Student Code of Conduct. Relevant Georgia laws to be aware of and compliant with include but may not be limited to:

O.C.G.A. § 16-8-12(a)(6)(A)(iii)

O.C.G.A. § 16-7-80

O.C.G.A. § 16-7-81

O.C.G.A. § 16-7-85

O.C.G.A. § 16-11-121

O.C.G.A. § 16-11-125.1

O.C.G.A. § 16-11-126

O.C.G.A. § 16-11-127

O.C.G.A. § 16-11-127.1

O.C.G.A. § 16-11-129

O.C.G.A. § 16-11-130

O.C.G.A. § 16-11-133

O.C.G.A. § 16-11-135

O.C.G.A. § 16-11-137

O.C.G.A. § 43-38-10

7. Gambling

Coastal Pines Technical College System of Georgia prohibits the violation of federal, state or local gambling laws on technical college premises or at technical college sponsored or supervised activities.

8. Parking

The technical college prohibits violation of Coastal Pines Technical College regulations regarding the operation and parking of motor vehicles on or around CPTC Premises.

9. Financial Irresponsibility

Coastal Pines Technical College prohibits the theft or misappropriation of any technical college, student organization or other assets.

10. Violation of Technical College Policy

Violation of System or Technical College Policies, rules or regulations including, but not limited to, rules imposed upon students who enroll in a particular class or program, internships, externships, practicum, clinical sites, co-operative, or any academic sponsored programs or activities, student organizations or students who reside in on-campus housing.

11. Aiding and Abetting

Aiding, abetting, or procuring another person to do an activity which otherwise violates this Code of Conduct is prohibited.

12. Falsification of Documentation

Disciplinary proceedings may be instituted against a student who falsifies any documentation related to the Coastal Pines Technical College either to the Technical College or to others in the community, including, but not limited to falsification of: Technical College transcripts; transcripts or other documentation from other institutions to obtain credit from or admission to the Technical College; Technical College report cards or other grade reports; documentation related to a student's citizenship status; tests, homework, attendance records; signature of any Technical College employee in his or her official capacity; signatures of any employee of a clinical or internship site where the student is participating in an educational program associated with the Technical College or records related to any clinical, internship or other academic activity associated with the Technical College.

13. Violation of Law

- If a Student is convicted or pleads Nolo Contendere to an on-campus or off-campus violation of federal, state, or local law, but not has not been charged with any other violation of the Student Code of Conduct, disciplinary action may nevertheless be taken and sanctions imposed if the violation of federal, state or local law is detrimental to the technical college's vital interests and stated mission and purpose.

- Disciplinary proceedings may be instituted against a student charged with violation of a law that is also a violation of the Student Code of Conduct if both violations result from the same factual situation, without regard to criminal arrest and/or prosecution. Proceedings under this Student Code of Conduct may be carried out prior to, simultaneously with, or following criminal proceedings.
 - When a student is charged by federal, state, or local authorities with a violation of law, the technical college will not request or agree to special consideration for that individual because of his/her status as a student. The technical college will cooperate fully with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students, acting in their personal capacities, remain free to interact with governmental representatives, as they deem appropriate.
14. Abuse of the Student Judicial Process, including but not limited to
- Failure to obey the notification of the Vice President for Student Affairs, Hearing Body, Appellate Board or Technical College Official.
 - Falsification, distortion, or misrepresentation of information in a judicial proceeding.
 - Disruption or interference with the orderly conduct of a disciplinary proceeding.
 - Initiating a disciplinary proceeding knowingly without cause.
 - Attempting to discourage an individual's proper participation in, or use of, the disciplinary process.
 - Attempting to influence the impartiality of a member of a Hearing Body, or Appellate Board prior to, and/or during the course of, the disciplinary proceeding.
 - Harassment (verbal or physical) and/or intimidation of a member of a Hearing Body, or Appellate Board prior to, during, and/or after a disciplinary proceeding.
 - Failure to comply with the sanction(s) imposed under the Student Code.

Student Disciplinary Procedure

Article IV: Judicial Policies

1. Filing a Complaint

- Any person may file a complaint with the Vice President for Student Affairs or designee against any student for an alleged violation of the Student Code of Conduct. The individual(s) initiating the action should complete a Student Code of Conduct Complaint Form, and provide it to the Vice President for Student Affairs.
- Academic Misconduct may be handled using this procedure or a separate Academic Misconduct Procedure at the discretion of the technical college president.
- Investigation and Decision
 - Within five business days after the Student Code of Conduct Complaint Form (the "Complaint") is filed, the Vice President for Student Affairs shall complete a preliminary investigation of the incident, and schedule a meeting with the student against whom the complaint was filed in order to discuss the incident and the allegations. In the event that additional time is necessary, the student will be notified. After discussing the complaint with the student, the Vice President for Student Affairs or designee shall determine whether the student committed the alleged conduct, and whether the alleged conduct constitutes a violation of the Student Code of Conduct.
 - The student shall have 5 business days from the date contacted by the Vice President for Student Affairs to schedule the meeting. This initial meeting may only be rescheduled one time. If the student fails to respond to the Vice President for Student Affairs within 5 business days to schedule the meeting, reschedules the meeting more than once, or fails to appear at the meeting, the Vice President for Student Affairs will consider the available evidence without student input and make a determination.
 - In the event that a Complaint alleges violations of the Student Code of Conduct by more than one student, each student's disciplinary proceeding, as well as any appeals relating to that proceeding, shall be conducted individually.
 - If the Vice President for Student Affairs determines that the student has violated the Student Code of Conduct, he/she shall impose one or more disciplinary sanctions consistent with those described below. If the Vice President for Student Affairs determines that the alleged conduct did not occur, or that the conduct was not a violation of the Student Code of Conduct, he/she shall not impose any disciplinary sanctions on the student and the investigation shall be closed.

2. Disciplinary Sanctions

Based on the severity of the incident, the Vice President for Student Affairs may take one of two actions:

- After a determination that a student has violated the Student Code of Conduct, the Vice President for Student Affairs may impose, without referral to the Hearing Body, one or more of the following sanctions. Notification shall be sent to the student and the person(s) who initially filed the complaint.
 - Restitution – A student who has committed an offense against property may be required to reimburse the technical college or other owner for damage to or misappropriation of such property. Any such payment in restitution shall be limited to the actual cost of repair or replacement.
 - Reprimand – A written reprimand may be given to any student. Such a reprimand does not restrict the student in any way, but it signifies to the student that he/she is in effect being given another chance to conduct himself/herself as a proper member of the technical college community, and that any further violation may result in more serious sanctions.
 - Restriction – A restriction upon a student's privileges for a period of time may be imposed. This restriction may include but is not limited to denial of the right to represent the technical college in any way, denial of use of facilities, alteration or revocation of parking privileges, or restrictions from participating in extracurricular activities.
 - Disciplinary Probation – Continued enrollment of a student on probation may be conditioned upon adherence to specified terms. Any student placed on probation will be notified of the terms and length of probation in writing. Any conduct determined after due process to be in violation of these terms while on probation may result in the imposition of more serious disciplinary sanctions, as specified by the terms of probation.
 - Failing or lowered grade – In cases of Academic Misconduct, the Vice President for Student Affairs will make a recommendation to the Vice President for Academic Affairs or his/her designee who may authorize the instructor to award a failing or lowered grade in the course, or a loss of credit on the assignment or examination.
- After a determination that a student has violated the Student Code of conduct, the Vice President for Student Affairs may recommend the imposition of one of the following sanctions if appropriate. The Vice President for Student Affairs' recommendation will be forwarded to the Hearing Body, which may impose one or more of the following sanctions, as well as those described in section VI.2 above, following a hearing. A copy of the written recommendation shall be provided to the student and the person filing the complaint.
 - Disciplinary Suspension – If a student is suspended, he/she is separated from the technical college for a stated period of time. Conditions of reinstatement, if any, must be stated in the notice of suspension.
 - Disciplinary Expulsion – Removal and exclusion from the technical college, Technical College controlled facilities, programs, events, and activities. A record of the reason for the student's dismissal is maintained by the Vice President for Student Affairs. Students who have been dismissed from the technical college for any reason may apply in writing to the Vice President for Student Affairs for reinstatement twelve (12) months following the expulsion. If approval for reinstatement is granted, the student will be placed on disciplinary probation for a specified term. The probationary status may be removed at the end of the specified term at the discretion of the Vice President for Student Affairs.
 - System-Wide Expulsion – Where a student has been expelled or suspended three times from the same or different colleges in the Technical College System of Georgia in the past seven years, the student will not be permitted to register at any college in the Technical College System of Georgia for a period of ten years after the most recent expulsion/suspension.
- Violation of Federal, State, or Local Law
 - If a student is convicted or pleads nolo contendere to an off-campus violation of federal, state, or local law, but not with any other violation of the Student Code of Conduct, disciplinary action may be taken and sanctions imposed for misconduct that is detrimental to the technical college's vital interests and stated mission and purpose.
 - Disciplinary proceedings may be instituted against a student charged with violation of a law that is also a violation of the Student Code of Conduct if both violations result from the same factual situation, without regard to criminal arrest and/or prosecution. Proceedings under this Student Code of Conduct may be carried out prior to, simultaneously with, or following criminal proceedings.
 - When a student is charged by federal, state, or local authorities with a violation of law, the technical college will not request or agree to special consideration for that individual because of his/her status as a student. The technical college will cooperate fully with law enforcement and

other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students, acting in their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

- Interim Disciplinary Suspension – As a general rule, the status of a student accused of violations of the Student Code of Conduct should not be altered until a final determination is made regarding the allegations against him/her. However, interim suspension may be imposed upon a finding by the Vice President for Student Affairs that the continued presence of the accused student on campus constitutes a potential or immediate threat to the safety and well-being of the accused student or any other member of the technical college community or its guests, or that the continued presence of the student on campus creates a risk of substantial disruption of classroom or other technical college-related activities. If an interim disciplinary suspension is imposed, the matter must be referred as soon as possible to the Hearing Body. The student need not request an appeal.
- Conditions of Disciplinary Suspension and Expulsion
 - A student who has been suspended or expelled from the technical college shall be denied all privileges afforded a student and shall be required to vacate technical college Premises at a time determined by the Vice President for Student Affairs.
 - In addition, after vacating the technical college Premises, a suspended or expelled Student may not enter upon the technical college Premises at any time, for any purpose, in the absence of written permission from the Vice President for Student Affairs. A suspended or expelled student must contact the Vice President for Student Affairs for permission to enter the technical college Premises for a limited, specified purpose.
 - If the student seeks to submit a signed Disciplinary Sanction Appeal Form, the Vice President for Student Affairs must accept the form by mail or fax if he/she refuses the Student's request to enter the Technical College Premises for that specified purpose.
 - A scheduled appeal hearing before the Hearing Body shall be understood as expressed permission from the Vice President for Student Affairs for a student to enter the technical college Premises for the duration of that hearing.

3. Mediation

- At the discretion of the technical college president the technical college may adopt a mediation procedure to be utilized prior to the appeals set forth herein. Mediation may never be used in cases of alleged sexual misconduct.

4. Hearing/Appeals Procedure

- A student who wishes to appeal a disciplinary decision by the Vice President for Student Affairs regarding an assigned sanction of restitution, reprimand, restriction, disciplinary probation, or failing or lowered grade must file a written notice of appeal through the technical college president's office for review by the Hearing Body within five business days of notification of the decision. The person filing the initial complaint against the student must be notified of the hearing date.
- If the Vice President for Student Affairs recommended a sanction of disciplinary suspension, disciplinary expulsion, interim disciplinary suspension, or system-wide expulsion, the matter will be referred to the Hearing Body by the Vice President for Student Affairs. The student need not file a written notice of his or her desire to appear before the Hearing Body. The person filing the initial complaint shall also be given notification of the hearing.
- The student will then have the right to appear in a hearing before a Hearing Body assigned by the technical college president or his/her designee within 10 business days to present evidence and/or testimony. If the student has been placed on an interim disciplinary suspension, the hearing must be held as soon as possible, preferably within five days. The student has the right to be assisted by any single advisor he/she chooses, at his/her own expense. The student is responsible for presenting his/her own case and, therefore, advisors are not permitted to speak or to participate directly in any hearing before a Hearing Body. The Hearing Body may consist of a single person or a group of people drawn from the technical college community. There shall be a single official record, such as a tape recording, of all hearings before the Hearing Body. The official record shall be the property of the technical college. The standard of proof in all hearings shall be a preponderance of the evidence. The chairperson of the Hearing Body shall notify the technical college president and the Vice President for Student Affairs in writing of the Hearing Body's decision. The technical college president or his/her designee will notify the student in writing of the Hearing Body's decision.

- If the student appeared before the Hearing Body to appeal the Vice President for Student Affairs' sanction of restitution, reprimand, restriction, disciplinary probation, or failing or lowered grade, the Hearing Body's decision regarding the appeal is final.
 - A copy of the Hearing Body's written decision will be provided to both the student and the person who filed the original complaint.
- If the student appeared before the Hearing Body after the Vice President for Student Affairs recommended disciplinary suspension, disciplinary expulsion, interim disciplinary suspension, or system-wide expulsion, the student shall have the opportunity to appeal directly to the technical college president.
- If entitled to an appeal to the technical college president, the student shall have 5 business days after receiving written notification of the Hearing Body's decision to request in writing an appeal. The student shall ensure that all relevant information is included with this request. The person who filed the original complaint shall be notified of the student's appeal.
- The president of the technical college or his/her designee's review shall be in writing and shall only consider evidence currently in the record, new facts not brought up in earlier stages of the appeal shall not be considered. The technical college president or his/her designee shall deliver the decision to the student and the person who filed the original complaint within 10 business days. The decision of the technical college president or his/her designee shall be final and binding.

Document Retention

The Vice President for Student Affairs shall retain a copy of all documents concerning complaints, investigations, administrative actions, and communications in relation to any incident that resulted in a disciplinary investigation of any kind against a student. The Vice President for Student Affairs will also retain records of any disciplinary appeals filed by the affected student, as well as the resulting record of appeal and decision submitted by the Hearing Body and the technical college president or his/her designee. A record of the final decision must also be retained. All records specified in this section shall be retained for a period of five years.

Student Complaints Grievances

Coastal Pines Technical College (CPTC) students have the right to file informal and formal complaints regarding issues arising from the application of a policy or procedure. It is the policy the Technical College System of Georgia (TCSG) and CPTC to maintain a complaint process available to all students that provides an open and meaningful forum for their complaints, resolution of those complaints, and is subject to clear guidelines. Given the variety of situations in which complaints might arise, the response to concerns will follow either an informal or formal process.

Informal Complaint:

Complaints are considered informal when they are expressed verbally, by mail, or submitted via the Suggestion Box on the CPTC website.

Formal Complaint:

Complaints are considered formal when the concern is submitted in writing and the document specifically indicates the writer intends to file a formal complaint. Concerns submitted by email will be considered informal unless the body of the email specifically indicates otherwise.

Procedures for filing formal complaints/grievances are published in the CPTC Catalog and Student Handbook, which is accessible on the CPTC website.

When filing a complaint/grievance, the student should adhere to specified deadlines and provide detailed information about the nature of the complaint, including date(s), time(s), and names of individuals involved, as well as the procedure violated (if known). Supporting documentation which substantiates the complaint should be included if available.

The office of the Vice President for Academic Affairs maintains a log of academic related student complaints that are processed at the Vice President's level.

The office of the Vice President for Student Affairs maintains a log of non-academic student complaints to include student code of conduct, sexual harassment, unlawful harassment, discrimination, and all other non-academic complaints or grievances.

Student logs are reviewed annually by the appropriate Vice President in order to identify trends and address recurring problems. Findings are shared with the Cabinet. If trends are identified, the Cabinet develops action plans to address the problems.

Type of Complaint/ Grievance	Directed To	Timeline for Complaint Resolution
Academic Grade Appeals	Academic Affairs	Student to appeal to the instructor who awarded the grade within 10 business days. If not resolved, to the Dean within 20 business days; then to the VP Academic Affairs within 30 business days.
Academic Suspension or Dismissal Appeal	Vice President for Academic Affairs	Student to file appeal within 10 business days from learning of Suspension or Dismissal
General Non-Academic	Vice President for Student Affairs	Student has 10 business days from date of incident to resolve the matter informally; if not resolved, 15 business days to file the formal grievance. The VP for Student Affairs or President's designee will investigate and respond to the student within 15 business days. An additional 15 business days shall be granted upon notice to the grieving student. The student may appeal the decision of the VP for Student Affairs or President's designee to the College President within 5 business days of receiving response. The decision of the appeal shall be made within 10 business days of receipt of the appeal.
Code of Conduct	Vice President for Student Affairs	Within 5 business days of a filed Code of Conduct Complaint, the VP for Student Affairs or designee shall conduct a preliminary investigation and schedule a meeting with the student against whom the complaint was filed. The student shall have 5 business days from the date contacted to schedule a meeting. If sanctions are recommended, the student shall have the right to appear in a hearing within 10 business days. If eligible for appeal, the student shall have 5 business days after receiving notification to file an appeal. The College President shall deliver the appeal decision within 10 business days.
Unlawful Harassment and Discrimination including Title VI/ Section 504/ADA and Title IX/Sex Discrimination	Special Services Director	Investigations of all complaints shall be completed within 45 business days of the receipt of the complaint. No later than 10 business days after completion of an investigation, parties will be provided investigative summary findings. Any of the parties to a complaint may request a review of the investigative findings within 5 business days of receiving notice. Within 10 business days of receiving a request for review, the President will notify the parties in writing of his/her final determination.

Academic Freedom

Coastal Pines Technical College (CPTC) supports the concept of academic freedom in accordance with State Board policy (5.1.1p Academic Freedom). CPTC safeguards and protects these rights of academic freedom by providing faculty and students the right to initiate grievance procedures should they have complaints dealing with the infringement of or personal penalization as the result of the exercise of this freedom.

To ensure academic freedom, any faculty member or student who believes his/her academic freedom has been violated may present a written complaint to the Vice President for Academic Affairs within seven (7) business days of the alleged incident. If the complaint is against the Vice President for Academic Affairs, the written complaint will be filed with the Vice President for Student Affairs. The complaint must contain a brief description of the alleged incident, relief requested, and the signature of the complainant. Within ten (10) business days of the complaint, an informal resolution will be attempted. If an informal resolution is not made, an investigation will be conducted and completed within 30 days by the appropriate Vice President.

At the conclusion of the investigation, a written report will be made presenting the findings of fact, investigative conclusions, and any recommended actions, if appropriate. If the complainant is not satisfied with the investigation report, he/she may present a written appeal to the President of CPTC stating the reasons for disagreement. The President will review the complaint and render a decision regarding a resolution within 30 days. If the complaint is against the President, the appeal will be filed with the Assistant Commissioner, Technical Education. The decision of the President or Assistant Commissioner is final.

Grievance/Compliant Appeals Officers

Type of Complaint	Complainant	Officer
Academic Appeals	Student	Vice President for Academic Affairs
American Disabilities Act - Title II/Section 504	Employee	Human Resource Coordinator
American Disabilities Act - Title II/Section 504	Student	Special Services Director
Employment Related Grievances	Employee	Human Resource Coordinator
Equity – Title VI	Employee	Human Resource Coordinator
Equity – Title VI	Student	Special Services Director
Sexual Discrimination - Title IX	Employee	Human Resource Coordinator
Sexual Discrimination - Title IX	Student	Special Services Director
Student Discipline/Code of Conduct	Student	Vice President for Student Affairs
General Non-Academic	Student	Vice President for Student Affairs

Unlawful Discrimination, Harassment, and Retaliation in Employment

Purpose:

It is the purpose of this procedure to ensure that all employees within the Technical College System of Georgia (TCSG) shall be provided an environment free of unlawful harassment (including sexual harassment and sexual violence), discrimination, and retaliation.

All employees and employees are expressly prohibited from engaging in any form of unlawful harassing, discriminating, intimidating or retaliatory behavior or conduct ("prohibited conduct") in all interactions with each other, whether or not the interaction occurs during class or on or off campus. Visitors to campuses also shall not engage in prohibited conduct and may be barred from campus for such prohibited conduct. Allegations of discrimination, harassment or retaliation, occurring at clinical sites to which employees are assigned shall be investigated in accordance with this procedure.

Any student or employee who has engaged in prohibited conduct will be subject to disciplinary action up to and including expulsion or dismissal. Nothing in this procedure shall be interpreted to interfere with any person's right to free speech as provided by the First Amendment to the Constitution of the United States of America.

All employees are required to report any prohibited conduct. Reports will be treated in an expeditious and confidential manner. CPTC will not tolerate retaliation for having filed a good faith harassment and/or discrimination complaint or for having provided any information in an investigation. Any individual who retaliates against a complainant or witness in an investigation will be subject to disciplinary action, up to and including expulsion or dismissal.

Employee complaints of unlawful harassment or discrimination shall be conducted pursuant to the process outlined in the procedure governing Unlawful Harassment, Discrimination and Retaliation in Employment.

Applicability:

All work units and technical colleges associated with the Technical College System of Georgia.

Related Authority:

State Board Policy 1.B. Statement of Equal Opportunity

Title IX of the Educational Amendments of 1972

20 U.S.C. §§ 1681 et seq.

Violence Against Women Reauthorization Act of 2013

Campus Sexual Violence Elimination Act (Campus SaVE)

O.C.G.A. § 19-7-5

Titles VI and VII of the Civil Rights Act of 1964

Age Discrimination Act of 1975

Rehabilitation Act of 1973, as amended

Americans with Disabilities Act of 1990

Americans with Disabilities Amendments Act (ADAAA) of 2008

Genetic Information Nondiscrimination Act (GINA) of 2008 Procedure: Student Grievances

Definitions:

1. **Unlawful Discrimination:** the treatment, or consideration of, or making a distinction in favor or against a person based upon a legally protected characteristic, class or category to which the person belongs: e.g. race, color, religion, gender, national origin, age, or disability. Unlawful discrimination can also be the effect of a procedure or practice that confers or denies privileges to a protected class because of race, color, religion, etc.
2. **Unlawful Harassment (Other Than Sexual Harassment):** Verbal or physical conduct that disparages or shows hostility or aversion toward an individual because of that person's race, color, religion, gender, national origin, age, or disability. The conduct will be considered Unlawful Harassment if it:
 - Has the purpose or effect of creating an intimidating, hostile or offensive work environment; or
 - Has the purpose or effect of unreasonably interfering with an individual's work performance.
3. **Examples of Unlawfully Harassing Conduct or Behavior (Other Than Sexual Harassment) or Generally Offensive Behavior/Conduct:**
 - Offensive remarks, jokes, epithets, slurs, negative stereotyping, or threatening, intimidating or hostile acts that relate to race, color, religion, gender, sexual orientation, national origin, age or disability;
 - Displaying offensive written or graphic material, pictures, photographs, or drawings on walls, bulletin boards, computers, or other work locations, or which are circulated in the work place;
 - Offensive e-mail, text or voice mail message(s), or inappropriate use of state resources (e.g. downloading sexually explicit websites and/or information); and Foul or obscene language. This is a representative list of harassing conduct or behavior and is not intended to be exhaustive.
4. **Sexual Harassment (a form of unlawful harassment):** unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal, written, electronic or physical conduct of a sexual nature when:
 - Submission to such conduct is made, either explicitly or implicitly, a term or condition of an individual's employment;
 - Submission to, or rejection of, such conduct by an individual is used as the basis for employment decisions affecting such individual; or
 - Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment.
5. **Examples of Sexually Harassing Conduct or Behavior:** Sexually harassing conduct or behavior (regardless of the gender of the persons involved) includes:
 - Physical touching; Sexual comments of a provocative or suggestive nature; Suggestive looks or gestures; Jokes, printed material or innuendoes; or Making acceptance of unwelcome sexual conduct, advances, or requests for sexual favors of any nature a condition for employment, employment decisions, or continued employment (pressure for sexual favors).
This is a representative list of conduct or behavior and is not intended to be exhaustive.
6. **Retaliation:** Unfavorable employment action taken, unfavorable employment condition created, or other action taken for the purpose of intimidation that is directed toward an employee because the employee reported or complained of unlawful discrimination or harassment or because the employee participated in an investigation of such.
7. **Employees:** Any individual employed in a full or part time capacity in any work unit and/or technical college associated with the Technical College System of Georgia ("TCSG").

8. Non-Employee: Any third party, (e.g. volunteer, vendor, contractor, etc.) who conducts business with or on behalf of a work unit or technical college.
9. President: the chief executive officer responsible for the management and operation of the technical college where the complainant and/or respondent are currently employed.
10. Human Resources Director: The highest ranking employee responsible for the human resource function at a technical college. The System Office Human Resources Director provides technical assistance and expertise to all college HR Directors and manages the human resource function for all work units not associated with a technical college.
11. Local Investigator: The person(s) at the technical college who is delegated the responsibility for the investigation of employee complaints of unlawful discrimination, harassment, and retaliation complaints. Local Investigators are typically staff from the college's Office of Human Resources but may also include Title IX Coordinators.
12. Title IX Coordinator: an individual designated by the president of the college to ensure compliance with Title IX of the Educational Amendments of 1972, 20 U.S.C. §§ 1681 et seq., and related federal regulations. The Title IX Coordinator may also be assigned the responsibility for compliance with other state and federal civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from the U.S. Department of Education.

Policy Administration

1. The State Board Policy Statement on Equal Opportunity should be permanently displayed on official bulletin boards of the technical colleges and System Office and easily assessable to staff.
2. Supervisors must take ongoing proactive steps to ensure their work environments are free from any type of discrimination, unlawful harassment and retaliation and to educate their staff on appropriate conduct.
3. All current and future employees shall be required to read and become familiar with the Statement of Equal Opportunity and other employment-related policies and procedures located in the TCSG State Board Policy Manual (tcsgeu.edu).
4. As a condition of employment, all employees (current and future) are required to read and sign the employee acknowledgment of this procedure which will become a permanent part of the employee's personnel record.
5. Any employee, student, contractor or volunteer who has any questions concerning this Procedure should direct those questions to the college's Title IX Coordinator or Human Resources Director.
6. Presidents should ensure that employees receive appropriate training on the identification, prevention, and reporting of sexual harassment.

Reporting and Management Action

1. All employees are required to report allegations of unlawful discrimination, harassment and retaliation against themselves or others, as well as other possible policy violations.
 - Allegations of unlawful discrimination, harassment or retaliation may be reported by employees within their chain of command, or may bypass the normal chain of command and report an allegation/suspicion directly to the Title IX Coordinator or Human Resources Director; employees may also email complaints to: UnlawfulHarassment@tcsgeu.edu.
 - Complaints can be expressed in writing, by telephone, or in person.
2. Supervisors who have reason to believe that unlawful discrimination, harassment and/or retaliation may exist shall immediately inform the President, Human Resources Director, Title IX Coordinator or the System Office Human Resources Director.
3. Other than reporting the information and discussing it with the investigator, employees must keep the information confidential unless release is approved, or unless final action has been taken pursuant to this Procedure.
4. Employment related unlawful discrimination, harassment or retaliation complaints received by the Title IX Coordinator shall be immediately reported to the Human Resources Director.
5. A President or other designee of the Commissioner may suspend with pay, temporarily transfer, or reassign employees involved in an investigation in order to prevent further discrimination or harassment or to facilitate the effectiveness of an investigation. Whenever possible, any changes in assignments or work status for a complainant should not be made.

6. Unless otherwise authorized by the System Office Human Resources Director or Office of Legal Services, no disciplinary action shall be taken against the respondent until an investigation has been completed.
NOTE: A suspension with pay pending completion of an investigation is not a disciplinary action.
7. All allegations of unlawful discrimination, harassment and retaliation by or against a System office employee, Vice President or President of a technical college shall be referred to the System Office Human Resources Director or the Office of Legal Services.
8. A President may refer any allegation of unlawful discrimination harassment, and/or retaliation to the System Office Human Resources Director or Office of Legal Services for investigation. Investigations may also be conducted in conjunction with the Local Investigator.

Investigations

1. All complaints shall be investigated thoroughly and should be completed within 45 business days of the receipt of the complaint. The parties will be notified if extraordinary circumstances exist requiring additional time.
2. If a complaint does not specify facts sufficient to support an allegation of unlawful discrimination, harassment or retaliation the President, after consultation with the Office of Legal Services, may determine the allegations will not be investigated pursuant to this Procedure. The complaint, if appropriate, may be investigated pursuant to the Employee Complaint Procedure. The complainant must be notified of the decision within five (5) business days of receipt of the complaint.
 - Upon consent by both the complainant and the respondent, any complaint not rising to an allegation of unlawful conduct may also be referred for mediation in lieu of investigation. Mediations must be conducted by a qualified objective-third party not employed by the college.
3. Both the complaining party and the respondent will be given an equal opportunity to identify witnesses and offer evidence in person or in writing. Best efforts will be made to interview all witnesses identified by the parties.
4. Conduct which does not rise to the level of unlawful discrimination or harassment as those terms are defined in this Procedure may still violate other policies or procedures and any such violations should be included in investigative findings.
5. Investigative materials generated through the application of this Procedure will be processed and maintained confidentially to the extent permitted by law.

Review and Disposition

1. Local Investigators and Presidents should consult with the Office of Legal Services when making the determination whether or not the facts support a finding of unlawful conduct.
2. If the results of the investigation do not support a finding of unlawful discrimination, harassment or retaliation, or other policy violations, the matter will be closed and the parties notified of such.
3. If the results of the investigation support a finding of unlawful harassment, discrimination or retaliation or any other policy violation, the President shall promptly take any necessary action to ensure the conduct is not repeated. Actions may include, but not be limited to, mandating training, issuance of disciplinary actions, or dismissal from employment.
4. Both the complainant and the respondent will be notified in writing of the results of the investigation; provided, however, that if disciplinary action is to be initiated as a result of the investigation, neither party will be notified until all disciplinary actions are taken.

Addendum

2024 -2025 Addendum

The following document represents additions, changes, and deletions to the 2022-2023 Coastal Pines Technical College Catalog and Student Handbook. These changes should replace any information that appeared in the 2023-2024 Coastal Pines Technical College Catalog

Section/Program Changes	Effective Date	Action	Information Changed
Cosmetology for Licensure CGL1	8/20/24	Added	New Program
Cybersecurity	8/13/2024	Removed	Removed Co-requisite from CIST 1601
Electrical Lineworker	10/9/2024	Removed	Electrical Lineworker was replaced by Electrical Lineworker with Pintle Hook Restriction
LPN ATI Dues	11/6/2024	Increase	ATI dues will increase from \$617.00/semester to \$672.67
Paramedic	4/16/2025	Updated	Program Outcomes
Education	4/21/25	Updated	Background check requirements
Medical Assisting	4/30/25	Updated	Updated 2024 Exam Passage Rate Outcomes

ACCT - Accounting

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis, Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance. Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.
Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.
Credits 4

ASTT - Aircraft Structural Technology

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment. Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.
Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.
Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems

Credits 2

AUTT 1011 : Basic Auto Maintenance and Light Repair

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.

Credits 6

Corequisites

AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.

Credits 6

Prerequisites

AUTT 1010

AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.

Credits 6

Prerequisites

AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.

Credits 3

Corequisites

AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.

Credits 7

Prerequisites

AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.

Credits 4

Prerequisites

AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.

Credits 7

Prerequisites

AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.

Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.

Credits 3

Corequisites

AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.

Credits 4

Prerequisites

AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.

Credits 4

Prerequisites

AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

Credits 4

Prerequisites

AVIO 1040

FISH - Basic Commercial Fisherman

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.

Credits 3

Prerequisites

Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel. Topics include weather reading, radio communication, and signals and navigation of the vessel.

Credits 3

Prerequisites

Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region. Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.

Credits 3

Prerequisites

Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation. Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.

Credits 3

Prerequisites

Program Admission.

BIOL - Biology

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 3

Corequisites

BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is intended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BCST - Business Technology

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

BUSN 1000 or COMP 1000 : Computers in Healthcare Or Intro to Computer Literacy**BUSN 1000**

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

BUSN 1010 : Medical Terminology, Anatomy, and Diseases for Business

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

BUSN 1015 : Introduction to Healthcare Reimbursement

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:

[ALHS 1090](#), or [BUSN 1010](#), or [BUSN 2300](#)

BUSN 1100 : Introduction to Keyboarding

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

BUSN 1190 : Digital Technologies in Business

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

BUSN 1300 : Introduction to Business

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

BUSN 1340 : Customer Service Effectiveness

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4

Prerequisites

COMP 1000

BUSN 1410 : Spreadsheet Concepts & Applications

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4

Prerequisites

COMP 1000

BUSN 1420 : Database Applications

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4

Prerequisites

COMP 1000

BUSN 1430 : Desktop Publishing & Presentation Applications

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4

Prerequisites

COMP 1000

BUSN 1440 : Document Production

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4

Prerequisites

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites

COMP 1000

BUSN 1800 : Introduction to Healthcare Accounting

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2

Prerequisites

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2

Prerequisites

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3

Prerequisites

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts
Credits 4

BUSN 2210 : Applied Office Procedures

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)

BUSN 2230 : Office Management

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3

Prerequisites

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

BUSN 2250 : Business Administrative Assistant Internship II

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

BUSN 2290 : Applied Business Technology

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.

Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.
Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.
Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.
Credits 4

Prerequisites
BUSN 2320**BUSN 2340 : Healthcare Administrative Procedures**

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4**Prerequisites**

BUSN 1010

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

BUSN 1440

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3

Prerequisites

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3

Prerequisites

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites

BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations. Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3

Prerequisites

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).

BUSN 2850 : Health Record Auditing

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans. Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3

Prerequisites

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)

COMP 1000 : Introduction to Computer Literacy

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

MGMT 1120 : Introduction to Business

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3

MGMT 2210 : Project Management

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3

MKTG 2500 : Exploring Social Media

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3

Corequisites

MKTG 1100

Carpentry

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3

CARP 1015 : Structural Framing I

Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

CHEM - Chemistry

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit

Credits 2

CTDL - Commercial Truck Driving

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students* driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safety on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4

Corequisites

CTDL 1021

COMM - Communication

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication.

Credits 3

COFC - Construction

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2

Prerequisites

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry

Credits 3

COFC 1020 : Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup

Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules

Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills

Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.

Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.

Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.

Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.

Credits 4

Corequisites

COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.

Credits 4

Corequisites

COFC 1080

COSM - Cosmetology

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites

COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites

COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites

COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites

COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites

COSM 1000

COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

COSM 1090 : Hair Services Practicum I

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000

COSM 1010

COSM 1020

COSM 1030

COSM 1040

COSM 1050

COSM 1100 : Hair Services Practicum II

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

COSM 1110 : Hair Services Practicum III

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

COSM 1115 : Hair Services Practicum IV

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2

Corequisites

COSM 1110

COSM 1120 : Salon Management

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3

Corequisites

COSM 1000

COSM 1125 : Skin & Nail Care Practicum

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2

Corequisites

COSM 1060

COSM 1070

CRJU - Criminal Justice

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3

CRJU 1021 : Private Security

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3

CRJU 1030 : Corrections

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3

CRJU 1040 : Principles of Law Enforcement

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3

CRJU 1043 : Probation and Parole

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3

CRJU 1050 : Police Patrol Operations

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3

CRJU 1052 : Criminal Justice Admin.

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security

Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps

Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms

Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software

Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting

Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security

Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy

Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies

Credits 4

Prerequisites

[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint

Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers

Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing

Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented

Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data

Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases

Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management

Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.

Credits 4

Prerequisites

CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

CIS 2321

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role laying exercises that students complete while developing their network upgrade proposals.

Credits 4

Prerequisites

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4

CIST 2452 : CISCO Switching, Routing, & Wiring Essentials

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4

Prerequisites

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4

Prerequisites

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security. Students will acquire the skills needed to design, implement, and support network security

Credits 4

CIST 2480 : AWS Cloud Foundations

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4

Prerequisites

CIST 1601

CIST 2742 : Beginning Python Programming

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4

CIST 2921 : It Analysis Design & Project Management

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4

CIST 2991 : Cist Internship I (Capstone)

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3

Guided Elective

Credits 4

DIET - Diesel Technology

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3

DIET 1010 : Diesel Electrical/Electronics

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7

Prerequisites

DIET 1000

DIET 1020 : Preventive Maintenance

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5

Prerequisites

DIET 1010

DIET 1030 : Diesel Engines

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6

Prerequisites

DIET 1010

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.

Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors.

Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.

Credits 3

DRFT - Drafting

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

Credits 4

DFTG 1109 : Auxiliary Views/Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

Credits 3

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

Credits 3

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children*s creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children*s creative development; facilitation of children*s creative expression, media, methods and materials across the curriculum; appreciation of children*s art processes and products; appreciation of children*s creativity in music, movement and dance; appreciation of children*s creative expression in play and creative drama; and art and music appreciation.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children's literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children's families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children's development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective

Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

Credits 3

EDUC - Education

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.

Credits 3

Prerequisites

ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.

Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and smirches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars. Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics-Computer Engineering Technology

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.

Credits 3

ECET - Engineering Technology

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3

Prerequisites

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3

Prerequisites

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3

Prerequisites

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3

Prerequisites

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3

Prerequisites

ENGL 1101

ARTS - Fine Arts

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

THOP 1105 : Timber Harvest Equip Oper I

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3

Prerequisites

THOP 1101

THOP 1106 : Timber Harvest Equip Oper II

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3

Prerequisites

THOP 1105

General Business

General Studies Area III Elective : 3 or 4 hrs

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

POLS 1101 : American Government

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980.

Credits 3

HORT - Horticulture

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.

Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.

Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective
Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012](#)/[MATH 1012](#)/MAT 102 or [MATH 1013](#)/MAT 1013/MAT 103.

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

EMPL - Job Acquisition Skills

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2**Prerequisites**

Effective Summer 2024 (202416) - Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4**MCHT 1012 : Blueprint for Machine Tool**

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3**MCHT 1013 : Machine Tool Math**

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3**Prerequisites**

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals.

Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4**MCHT 1020 : Heat Treatment & Surface Grinding**

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders.

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

MGMT 1100 : Principles of Management

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

MGMT 1105 : Organizational Behavior

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

MGMT 1110 : Employment Rules & Regulations

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3

MGMT 2125 : Performance Management

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3

MGMT 2130 : Employee Training & Development

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

Credits 3

MAET - Marine Engine Technology

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4

Prerequisites

MAET 1000

MAET 1150 : Marine Accessories

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4

Prerequisites

MAET 1000

MKTG - Marketing

Guided Elective - Marketing

[MGMT 1100](#)

OR

[MKTG 1130](#)

[ACCT 2140](#)

[PARA 1150](#)

Credits 3

MGMT 2115 : Human Resource Management

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

Credits 3

MKTG 1100 : Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.

Credits 3

MKTG 1130 : Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3

MKTG 1160 : Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3

MKTG 1161 : Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 & minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

MEGT 1010 : Manufacturing Process

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

MEGT 1321 : Machining and Welding

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2

Prerequisites

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3

Prerequisites

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4

Prerequisites

MEGT 2030

MAST - Medical Assisting

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant's role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

Credits 2

MAST 1030 : Pharmacology in the Medical Office

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

Credits 4

Prerequisites

Program Admission, MATH 1012.

MAST 1060 : Medical Office Procedures

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.

Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.

Credits 4

Prerequisites

Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Furtheres student knowledge of the more complex activities in a physician*s office. Topics include: collection/ examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.

Credits 4

Prerequisites

Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2

Prerequisites

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

NEUT - Neuromuscular Massage Therapy

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90

Credits 3

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90

Credits 3

THMT 1002 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1006 : Pathology for Massage Therapist

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60

Credits 2

Prerequisites

Program Admission

THMT 1101 : Fundamentals of Massage II

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1102 : Technique and Theory II

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

NAST - Nurse Aide

NAST 1100 : Nurse Aide Fundamentals

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

NAST 2100 : Nurse Aide Accelerated

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7

Corequisites

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3

RNSG - Nursing (ASN)

RNSG 2021 : Fundamentals of Nursing

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities, growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6

Prerequisites

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3

Prerequisites

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

RNSG 2029

RNSG 2031

PARA - Paralegal Studies

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks. The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3

Corequisites

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3

Corequisites

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6

Prerequisites

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3

Prerequisites

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6

Prerequisites

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Realistic work situations are used to provide students with in-sights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6

Prerequisites

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardio-pulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1

EMSP 1510 : Advanced Concepts for the AEMT

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3

EMSP 1520 : Advanced Patient Care for the AEMT

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3

Corequisites

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1

Corequisites

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5

Corequisites

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4

Prerequisites

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2550

EMSP 2560

EMSP 2710

PHLT - Phlebotomy

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3

Prerequisites

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology

Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system

Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education

Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.

Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.

Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.

Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.

Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.
Credits 5

PSYC - Psychology

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.
Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.
Credits 3

RADT - Radiologic Technology

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4

Prerequisites

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3

Prerequisites

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3

Prerequisites

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2

Prerequisites

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4

Prerequisites

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3

Prerequisites

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2

Prerequisites

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3

Prerequisites

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.

Credits 3

Prerequisites

SCMA 1003

READ - Reading Writing

READ 0090 : Learning Support Reading I

No description available at this time.

Credits 3

READ 0091 : Learning Support Reading II

Credits 3

Prerequisites

minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.

Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

RESP 1110 : Pharmacology

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1

Prerequisites

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1

Prerequisites

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3

Prerequisites

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3

Prerequisites

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Prerequisites

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2

Corequisites

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

BIOL 2117

BIOL 2117L

MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2130 : Surg Tech Clinical III

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2140 : Surg Tech Clinical IV

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2240 : Seminar in Surgical Technology

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.

Credits 2

THEA - Theater Appreciation

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.

Credits 3

WELD - Welding and Joining Technology

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.

Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.

Credits 4

Corequisites

WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Corequisites

WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1090

WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1050

WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

ACCT - Accounting

Accounting AC13

Type

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
Minimum Credit Hours for Graduation		64

Accounting AC12

Type

Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
Minimum Credit Hours for Graduation		42-43

Office Accounting Specialist OA31

Type

Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
Minimum Credit Hours for Graduation		14

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type

Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		51

Advanced Commercial Refrigeration AC81

Type

Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
Minimum Credit Hours for Graduation		12

Air Conditioning Electrical Technician ACK1

Type

Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
Minimum Credit Hours for Graduation		12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
Minimum Credit Hours for Graduation		20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
Minimum Credit Hours for Graduation		12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Minimum Credit Hours for Graduation		16

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., [Please Click Here](#).

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
Minimum Credit Hours for Graduation		12

Automotive Collision Repair Assistant II AZ51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71

Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
Minimum Credit Hours for Graduation		10

AUTT - Automotive Technology

Automotive Fundamentals AF12

Type

Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		40

Automotive Technology AT14

Type

Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		55

Auto Electrical/Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
Minimum Credit Hours for Graduation		9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/Steering Systems	4
Minimum Credit Hours for Graduation		17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7
Minimum Credit Hours for Graduation		16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
Minimum Credit Hours for Graduation		15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

*** Dual Enrollment Only**

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6

AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
Minimum Credit Hours for Graduation		20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
Minimum Credit Hours for Graduation		8

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1

Type

Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
Minimum Credit Hours for Graduation		27

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1

Type

Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region. Commercial fishermen in Georgia use a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

* Dual Enrollment Only

Required Courses — 12 Hours

Item #	Name	Credits
FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3
Minimum Credit Hours for Graduation		12

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type

Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides

learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

*** Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization**

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3

BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3
BUSN 2850	Health Record Auditing	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
	Guided Electives	
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2

Type

Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3

BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
Occupational-Guided Electives (7 hrs)		7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
Minimum Credit Hours for Graduation		46

Healthcare Billing and Coding Specialist HBC1

Type

Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		31

Healthcare Billing and Reimbursement Assistant HBA1

Type

Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		18

Healthcare Office Assistant HFA1

Type

Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
Specific Occupational-Guided Electives (6 credits)		6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
Minimum Credit Hours for Graduation		64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits

MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4
	Select BUSN 2375 or BUSN 2370	3
	Select ALHS 1010, ALHS 1011, or BUSN 2310	3
	Select BUSN 2300 or ALHS 1090	2
	Electives (9 credits)	9
	Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type

Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type

Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		14

Technical Specialist TC31

Type

Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
Occupationally Related Electives		

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Minimum Credit Hours for Graduation	30-39

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61

Type

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

COFC - Construction

Basic Electrical Technician BE11

Type

Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		13

Certified Construction Worker CCW1

Type

Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

* Select Option 1 or Option 2

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
	Minimum Credit Hours for Graduation	9

NCCER Carpentry Fundamentals, CF21

Type

Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type

Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits
ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4
Minimum Credit Hours for Graduation		12

NCCER Plumber's Assistant BP11

Type

Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
Minimum Credit Hours for Graduation		12

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type

Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work

ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills,

and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		44

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED Required:

For Admission: No

For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits

COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
Minimum Credit Hours for Graduation		36

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques, reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	3
COSM 1120	Salon Management	3

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		12

CRJU - Criminal Justice

AS Criminal Justice, AF63

Type

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a

combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type

Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
	CRJU 2090 or CRJU 2100	3

Occupational Electives — 15 Hours

Item #	Name	Credits
CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3
CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3

CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
Minimum Credit Hours for Graduation		60

Criminal Justice Technology CJT2

Type

Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
CRJU 2090 or CRJU 2100		3

Occupational Electives — 9 Hours

Item #	Name	Credits
	CRJU Occupational Electives (9 hrs)	9
Minimum Credit Hours for Graduation		48

Crime Scene Fundamentals CZ31

Type

Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
Minimum Credit Hours for Graduation		12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
Minimum Credit Hours for Graduation		15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for

successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 2050	Criminal Procedure	3
Minimum Credit Hours for Graduation		12

CUUL - Culinary Arts

Prep Cook PC51

Type

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

* High School Admissions Only

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
Minimum Credit Hours for Graduation		12

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3

Cybersecurity CY13

Type

Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits

ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Guided Electives (4 credits)		4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	66

Computer Support Specialist CS14

Type

Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		55-56

Cybersecurity CY12

Type

Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIS Networking Electives (8 hrs)		8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type

Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

***Choose either the Microsoft or the Cisco Specialization**

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST Electives (9 credits)		9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits

CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO
CIST 2452	CISCO Switching, Routing, & Wiring Essentials
CIST 2453	Enterprise Networking, Security, and Automation
Guided Elective	4

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4
	Minimum Credit Hours for Graduation	54-55

AWS Cloud Solutions Specialist AA91

Type

Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	16

Cisco Network Specialist CN71

Type

Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits	
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
Guided Elective	4	
Minimum Credit Hours for Graduation		16

CompTIA A+ Certified Preparation CA61

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
Minimum Credit Hours for Graduation		10

CompTIA A+ Certified Technician Preparation CA71

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
	Guided Electives (4 credits)	4
Minimum Credit Hours for Graduation		18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
Minimum Credit Hours for Graduation		21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Minimum Credit Hours for Graduation		26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
	CIST 2371 or CIST 2742	4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
Guided Electives (4 credits)		4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130 or CIST 1135		3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
CIST 2414 or CIST 2420		4
Minimum Credit Hours for Graduation		16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
Minimum Credit Hours for Graduation		16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1130 or CIST 1135		3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3
CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
Minimum Credit Hours for Graduation		11

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
Minimum Credit Hours for Graduation		47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
Minimum Credit Hours for Graduation		9

Diesel Electrical & Electronic Systems Technician DE11

Type

Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
Minimum Credit Hours for Graduation		10

Diesel Engine Service Technician DE21

Type

Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
Minimum Credit Hours for Graduation		16

Diesel Truck Maintenance Technician DTM1

Type

Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
Minimum Credit Hours for Graduation		23

Heavy Diesel Service Technician HD31

Type

Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
Minimum Credit Hours for Graduation		31

DRFT - Drafting

Drafting Technology DT13 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and

reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must select and complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Occupationally Related Electives	

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3

DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
Occupationally Related Electives		
Minimum Credit Hours for Graduation		60

Drafting Technology DT12 (NO Longer Accepting Students)

Type

Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

*** Choose one of the following:**

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31

Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCL 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
Minimum Credit Hours for Graduation		72

Early Childhood Care and Education ECC2

Type

Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000 or PSYC 1010		2-3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3

ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
Minimum Credit Hours for Graduation		53

Child Development Specialist CD61

Type

Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1121 or EMPL 1000		2-3
Minimum Credit Hours for Graduation		14

Early Childhood Care and Education Basics EC31

Type

Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3

EDUC - Education

Education ED13

Type

Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

* **Students** - Choose from and complete either STEM Specialization:

- Math Concentration (16 hrs)
- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education Paraprofessional EP11

Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
Minimum Credit Hours for Graduation		14

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type
Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3
ELTR 1180	Electrical Controls	4
Specific Occupational-Guided Electives (3 credits)		3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3
Specific Occupational-Guided Electives (3 credits)		3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
	Specific Occupational-Guided Electives (3 credits)	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	54

NCCER Basic Electrical Systems Technician, BES1

Type

Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
	Minimum Credit Hours for Graduation	12

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type

Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type

Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2
- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits

ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
Occupational Elective (3 hrs)		3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3
ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors & Robotics	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4

BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
Minimum Credit Hours for Graduation		54

Basic Electricity Technician BE31

Type

Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
Minimum Credit Hours for Graduation		13

Basic Electronic Assembler BE41

Type

Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
Minimum Credit Hours for Graduation		10

Digital Electronics Technician DET1

Type

Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits

ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2
Minimum Credit Hours for Graduation		13

Electrical Lineworker with Pintle Hook Restriction EL21

Type

Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
Minimum Credit Hours for Graduation		13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		10

UAST - Electronics-Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1
ECET 1191	Computer Programming Fundamentals	3
ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13
- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3

ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following courses and the corresponding lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
Guided Electives - 9 Credit Hours		9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4
DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
MET Occupation Courses - minimum 9 credits		9
Guided Electives 3+		3
Minimum Credit Hours for Graduation		63

Engineering Technology Basics EBT1

Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

*** Students must choose one of the following options:**

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
Minimum Credit Hours for Graduation		20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
Minimum Credit Hours for Graduation		13

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4

FORS 2460	Forest Management	6
	Guided Electives 3+	3

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
	Minimum Credit Hours for Graduation	62

Forestry Technology FT12

Type

Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
Minimum Credit Hours for Graduation		52

Basic Timber Harvesting BT41

Type

Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
Minimum Credit Hours for Graduation		12

Forestry Technician Assistant FTA1

Type

Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4
FORS 1160	Forest Surveying and Mapping	4
Minimum Credit Hours for Graduation		14

Land Surveying Technician LST1

Type

Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
Minimum Credit Hours for Graduation		14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
Minimum Credit Hours for Graduation		18

General Business

General Business GB13

Type

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1120	Spreadsheet Applications	4

ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
Minimum Credit Hours for Graduation		68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3

PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation	60

HORT - Horticulture

Horticulture EH13

Type

Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization - 8GH3
- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3

RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits

HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type

Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
	Guided Electives	

Landscape Management Specialization — 15 Hours

Item #	Name	Credits

HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	Guided Electives	
	Minimum Credit Hours for Graduation	45

Floral Designer FD11

Type

Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	15

Garden Center Technician GC31

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required

For Admissions: No

For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3
	Minimum Credit Hours for Graduation	12

Landscape Specialist LS11

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
Minimum Credit Hours for Graduation		17

Nursery/Greenhouse Technician PPS1

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
Minimum Credit Hours for Graduation		17

IDSY - Industrial Systems

Electrical Control Systems EC22

Type

Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	44

Industrial Mechanical Systems IMS2

Type
Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
	Occupational Electives (11 hrs)	11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3
IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
	Minimum Credit Hours for Graduation	51

Industrial Systems Technology IST4

Type
Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF11

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM41

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits

IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
Minimum Credit Hours for Graduation		12

Manufacturing Maintenance Fundamentals MM11

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
Minimum Credit Hours for Graduation		12

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109		3

Area II - Social/Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
MATH 1101, MATH 1103, or MATH 1111		3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation

61

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type
Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
	Occupational Guided Electives (6 hrs)	6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6
	Minimum Credit Hours for Graduation	45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4

AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
Minimum Credit Hours for Graduation		22

Metals Technician ME31

Type

Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4
WELD 1090	Gas Metal Arc Welding	4
Minimum Credit Hours for Graduation		20

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits
MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
Minimum Credit Hours for Graduation		15

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

*** Students must choose one of the following Specializations:**

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Elective (3 credits +)	3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/Practicum	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	63

Marketing Management MM12

Type

Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2

- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Guided Electives 3+	3

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3
MKTG 2030	Digital Publishing and Design	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 2120, or MKTG 1130	3
Minimum Credit Hours for Graduation		24

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce

academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
Minimum Credit Hours for Graduation		53

Naval Apprenticeship

Naval Electrician Apprentice EW11

Type

Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprenticeship TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprenticeship TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3
Minimum Credit Hours for Graduation		18

Naval Machine Tool Apprentice NM51

Type

Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4
Minimum Credit Hours for Graduation		28

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3

WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4
NEUT 1010	Neural Science	120 4

NEUT 1020	Pathology/Neuromuscular Therapy		3
NEUT 1030	Neuromuscular Therapy Fundamentals		3
NEUT 1050	Technique and Theory I		5
NEUT 1060	Clinic I		2
NEUT 1080	Techniques and Theory III	90	3
NEUT 1081	Techniques and Theory III		3
NEUT 1100	Adjunctive Modalities		3
NEUT 1110	Licensure Review		3
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy		2
Minimum Credit Hours for Graduation			57

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort Program - Accepting Students Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3
THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4

NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation			36

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73

Type

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1% Combined 1st Time Test Takers and Repeaters

Program Completion Rate: 100% (29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326

(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate nursing program is Initial Accreditation.

Links:

[Program Handbook](#)

[ASN Competitive Admissions Guide](#)

Competitive Admissions Program Application:

[ASN Program Application](#)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the following (not already taken in Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7

RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
Minimum Credit Hours for Graduation		67

PARA - Paralegal Studies

Paralegal Studies PS13

Type

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3

HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA 2210	6

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
Minimum Credit Hours for Graduation		69

Paralegal Studies PS12

Type

Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
Minimum Credit Hours for Graduation		38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
Minimum Credit Hours for Graduation		12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits
PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	Minimum Credit Hours for Graduation	30

EMSP - Paramedicine

EMS Professions EP12

Type

Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type

Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709

Seminole, FL 33775

Phone: (727) 210-2350

Fax: (727) 210-2354

Website Link <https://www.caahep.org/>

CoAEMSP

8301 Lakeview Parkway, Suite 111-312

Rowlett, TX 75088

Phone: (214) 703-8445

Fax: (214) 703-8992

Website Link <https://coaemsp.org/>

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2
EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic Vi	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
Minimum Credit Hours for Graduation		58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		10

Emergency Medical Responder (EMR), EB71

Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4
ALHS 1090	Medical Terminology for AHS	2
Minimum Credit Hours for Graduation		11

Emergency Medical Technician (EMT) EMJ1

Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
Minimum Credit Hours for Graduation		16

Pre-hospital EMS Operations PEO1

Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link

from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		26

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
Minimum Credit Hours for Graduation		24

Practical Nursing and Related

Behavioral Health Technician BHT1

Type

Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
Minimum Credit Hours for Graduation		12

Geriatric Care Assistant GC51

Type

Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals		6-7
Minimum Credit Hours for Graduation			18-19

Health Care Assistant HA21

Type

Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

* Students must complete one of the listed specializations

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences		2

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
Minimum Credit Hours for Graduation		30-31

Nurse Aide CN21

Type

Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services.

Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
NAST 1100	Nurse Aide Fundamentals	6
Minimum Credit Hours for Graduation		13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
Minimum Credit Hours for Graduation		3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.
<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3
PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
Minimum Credit Hours for Graduation		49

RADT - Radiologic Technology

Radiologic Technology RT23

Type

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
Minimum Credit Hours for Graduation		77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
Minimum Credit Hours for Graduation		25

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

* Students must complete one of the Specializations below:

- Mechanical Specialization 8M33
- Electrical Specialization 8E43

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair Systems Technology diploma prepares students for a career in the railroad/ locomotive industry as a Car Repairman, Sheet Metal Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type

Diploma

The Locomotive Electrical/Mechanical Technology program will prepare students for employment in the railroad industries. Students will gain skills to become locomotive electricians, locomotive mechanics, car repairman, and sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		58

Locomotive Car Repair Technician LCR1

Type

Technical Certificate of Credit

Diagnose, adjust, repair, or overhaul railroad cars. Students will become familiar with the rail industry; knowledge of locomotives (EMD and GE) and locomotive air brake systems; Department of Transportation and FRA rules and OSHA regulations; fundamental concepts and operations of locomotive mechanical systems. Students will be proficient with safety practices, equipment, and techniques necessary for metal heating and cutting principles; cutting torches and apparatus; metal heating techniques; metal cutting techniques; manual and automatic oxyfuel cutting techniques; oxyfuel pipe cutting; reading welding and related blueprints and sketches; shielded metal arc welding (SMAW) in flat positions; horizontal SMAW safety and health practices; selection and applications of electrodes, selection and applications for horizontal SMAW; horizontal SMAW joints; techniques required for shielded metal arc welding (SMAW) in the vertical position; selection and

applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification; overhead SMAW safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
Minimum Credit Hours for Graduation		17

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs). The standards for the program can be viewed by clicking [here](#).

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
<http://www.coarc.com/>

CoARC Program Number: 200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."

[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
Minimum Credit Hours for Graduation		78

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3

ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
Minimum Credit Hours for Graduation		72

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type

Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and

practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
	Program Electives (6 hrs)	6
	Minimum Credit Hours for Graduation	54

Advanced Shielded Metal Arc Welder, OSM1

Type

Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Basic Shielded Metal Arc Welder FS31

Type

Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
Minimum Credit Hours for Graduation		12

Gas Metal Arc Welder GM31

Type

Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		15

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4

Occupational Elective (3 hrs)	3
Minimum Credit Hours for Graduation	15

ACCT - Accounting

Accounting AC13

Type

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
	Minimum Credit Hours for Graduation	64

Accounting AC12

Type

Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	42-43

Office Accounting Specialist OA31

Type

Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
	Minimum Credit Hours for Graduation	14

Accounting Course Descriptions

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis, Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance. Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

Advanced Machine Tool Course Descriptions

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type

Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4

Specific Occupational-Guided Electives (3 credits)	3
Minimum Credit Hours for Graduation	51

Advanced Commercial Refrigeration AC81

Type

Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
Minimum Credit Hours for Graduation		12

Air Conditioning Electrical Technician ACK1

Type

Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
Minimum Credit Hours for Graduation		12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4

AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
Minimum Credit Hours for Graduation		20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
Minimum Credit Hours for Graduation		12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Minimum Credit Hours for Graduation		16

Air Conditioning Technology Course Descriptions

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.

Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.

Credits 4

ASTT - Aircraft Structural Technology

Aircraft Structural Technology Course Descriptions

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment. Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.

Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.

Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., Please Click Here.

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
Minimum Credit Hours for Graduation		12

Automotive Collision Repair Assistant II AZ51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71

Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
Minimum Credit Hours for Graduation		10

Automotive Collision Course Descriptions

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

Automotive Fundamentals AF12**Type**

Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and

advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		40

Automotive Technology AT14

Type
Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7

AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		55

Auto Electrical/Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
Minimum Credit Hours for Graduation		9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/Steering Systems	4
Minimum Credit Hours for Graduation		17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7
Minimum Credit Hours for Graduation		16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
Minimum Credit Hours for Graduation		15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

* Dual Enrollment Only

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6
AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
Minimum Credit Hours for Graduation		20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
Minimum Credit Hours for Graduation		8

Automotive Technology Course Descriptions

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems

Credits 2

AUTT 1011 : Basic Auto Maintenance and Light Repair

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.

Credits 6

Corequisites

AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.

Credits 6

Prerequisites

AUTT 1010

AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.

Credits 6

Prerequisites

AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.

Credits 3

Corequisites

AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.

Credits 7

Prerequisites

AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.

Credits 4

Prerequisites

AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.

Credits 7

Prerequisites

AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1**Type**

Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
Minimum Credit Hours for Graduation		27

Avionics Maintenance Technology Course Descriptions

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.

Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.

Credits 3

Corequisites

AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.

Credits 4

Prerequisites

AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.

Credits 4

Prerequisites

AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

Credits 4

Prerequisites

AVIO 1040

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1**Type**

Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region Commercial fishermen in Georgia using a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

*** Dual Enrollment Only**

Required Courses — 12 Hours

Item #	Name	Credits
FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3
Minimum Credit Hours for Graduation		12

Basic Commercial Fisherman Course Descriptions

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.

Credits 3

Prerequisites

Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel. Topics include weather reading, radio communication, and signals and navigation of the vessel.

Credits 3

Prerequisites

Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region. Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.

Credits 3

Prerequisites

Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation. Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.

Credits 3

Prerequisites

Program Admission.

BIOL - Biology

Biology Course Descriptions

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 3

Corequisites

BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is intended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type

Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the

program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

*** Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization**

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits

ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
	Guided Electives	
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2

Type

Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
	Occupational-Guided Electives (7 hrs)	7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
Minimum Credit Hours for Graduation		46

Healthcare Billing and Coding Specialist HBC1

Type

Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		31

Healthcare Billing and Reimbursement Assistant HBA1

Type

Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		18

Healthcare Office Assistant HFA1

Type

Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
Specific Occupational-Guided Electives (6 credits)		6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
Minimum Credit Hours for Graduation		64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits

MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4
	Select BUSN 2375 or BUSN 2370	3
	Select ALHS 1010, ALHS 1011, or BUSN 2310	3
	Select BUSN 2300 or ALHS 1090	2
	Electives (9 credits)	9
	Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type

Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type

Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		14

Technical Specialist TC31

Type

Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
Occupationally Related Electives		

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Minimum Credit Hours for Graduation	30-39

Business Technology Course Descriptions

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

BUSN 1000 or COMP 1000 : Computers in Healthcare Or Intro to Computer Literacy

[BUSN 1000](#)

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

[COMP 1000](#)

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

BUSN 1010 : Medical Terminology, Anatomy, and Diseases for Business

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

BUSN 1015 : Introduction to Healthcare Reimbursement

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:

[ALHS 1090](#), or [BUSN 1010](#), or [BUSN 2300](#)

BUSN 1100 : Introduction to Keyboarding

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

BUSN 1190 : Digital Technologies in Business

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

BUSN 1300 : Introduction to Business

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

BUSN 1340 : Customer Service Effectiveness

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4

Prerequisites

COMP 1000

BUSN 1410 : Spreadsheet Concepts & Applications

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4

Prerequisites

COMP 1000

BUSN 1420 : Database Applications

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4

Prerequisites

COMP 1000

BUSN 1430 : Desktop Publishing & Presentation Applications

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4

Prerequisites

COMP 1000

BUSN 1440 : Document Production

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4

Prerequisites

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites

COMP 1000

BUSN 1800 : Introduction to Healthcare Accounting

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2

Prerequisites

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2

Prerequisites

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3

Prerequisites

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts

Credits 4

BUSN 2210 : Applied Office Procedures

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)

BUSN 2230 : Office Management

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3

Prerequisites

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

BUSN 2250 : Business Administrative Assistant Internship II

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

BUSN 2290 : Applied Business Technology

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.

Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.

Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.

Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

Credits 4

Prerequisites

BUSN 2320

BUSN 2340 : Healthcare Administrative Procedures

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4

Prerequisites

BUSN 1010

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

BUSN 1440

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3

Prerequisites

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3

Prerequisites

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites

BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations. Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3

Prerequisites

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).

BUSN 2850 : Health Record Auditing

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans. Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3

Prerequisites

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)

COMP 1000 : Introduction to Computer Literacy

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

MGMT 1120 : Introduction to Business

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3

MGMT 2210 : Project Management

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3

MKTG 2500 : Exploring Social Media

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3

Corequisites

MKTG 1100

Carpentry

Carpentry Course Descriptions

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3

CARP 1015 : Structural Framing I

Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

CHEM - Chemistry

Chemistry Course Descriptions

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

College Success Course Descriptions

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit

Credits 2

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61

Type

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

Commercial Truck Driving Course Descriptions

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students* driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safety on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4

Corequisites

CTDL 1021

COMM - Communication

Communication Course Descriptions

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication.

Credits 3

COFC - Construction

Basic Electrical Technician BE11

Type

Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		13

Certified Construction Worker CCW1

Type

Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

* Select Option 1 or Option 2

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
	Minimum Credit Hours for Graduation	9

NCCER Carpentry Fundamentals, CF21

Type

Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type

Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits
ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4

NCCER Plumber's Assistant BP11

Type

Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
Minimum Credit Hours for Graduation		12

Construction Course Descriptions

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2

Prerequisites

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry

Credits 3

COFC 1020 : Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup

Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules

Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills

Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.

Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.

Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.

Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.

Credits 4

Corequisites

COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.

Credits 4

Corequisites

COFC 1080

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type

Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills, and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		44

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED Required:
 For Admission: No
 For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
Minimum Credit Hours for Graduation		36

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques, reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	3
COSM 1120	Salon Management	3

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		12

Cosmetology Course Descriptions

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites

COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites

COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites

COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites

COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites

COSM 1000

COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

COSM 1090 : Hair Services Practicum I

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000

COSM 1010

COSM 1020

COSM 1030

COSM 1040

COSM 1050

COSM 1100 : Hair Services Practicum II

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

COSM 1110 : Hair Services Practicum III

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

COSM 1115 : Hair Services Practicum IV

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2

Corequisites

COSM 1110

COSM 1120 : Salon Management

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3

Corequisites

COSM 1000

COSM 1125 : Skin & Nail Care Practicum

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2

Corequisites

COSM 1060

COSM 1070

CRJU - Criminal Justice

AS Criminal Justice, AF63

Type

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3
MATH 1131	Calculus I	4

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type

Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3

Occupational Electives — 15 Hours

Item #	Name	Credits
CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3
CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
Minimum Credit Hours for Graduation		60

Criminal Justice Technology CJT2

Type
Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3

CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
CRJU 2090 or CRJU 2100		3

Occupational Electives — 9 Hours

Item #	Name	Credits
	CRJU Occupational Electives (9 hrs)	9
	Minimum Credit Hours for Graduation	48

Crime Scene Fundamentals CZ31

Type

Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
	Minimum Credit Hours for Graduation	12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3

CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
Minimum Credit Hours for Graduation		15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 2050	Criminal Procedure	3
Minimum Credit Hours for Graduation		12

Criminal Justice Course Descriptions

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3

CRJU 1021 : Private Security

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3

CRJU 1030 : Corrections

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3

CRJU 1040 : Principles of Law Enforcement

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3

CRJU 1043 : Probation and Parole

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3

CRJU 1050 : Police Patrol Operations

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3

CRJU 1052 : Criminal Justice Admin.

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

Prep Cook PC51

Type

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

*** High School Admissions Only**

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
Minimum Credit Hours for Graduation		12

Culinary Arts Course Descriptions

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		62

Cybersecurity CY13

Type

Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
	Guided Electives (4 credits)	4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4

CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	66

Computer Support Specialist CS14

Type

Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4

CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
CIST Electives (12 credits)		12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		55-56

Cybersecurity CY12

Type

Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
	CIS Networking Electives (8 hrs)	8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type
Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.
The CIS program is a member of the Microsoft IT Academy.

*Choose either the Microsoft or the Cisco Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
	CIST Electives (9 credits)	9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO
CIST 2452	CISCO Switching, Routing, & Wiring Essentials
CIST 2453	Enterprise Networking, Security, and Automation
Guided Elective	4

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

AWS Cloud Solutions Specialist AA91

Type

Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	16

Cisco Network Specialist CN71

Type

Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits	
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
Guided Elective	4	
Minimum Credit Hours for Graduation		16

CompTIA A+ Certified Preparation CA61

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4

CIST 1130 or CIST 1135	3-4
Minimum Credit Hours for Graduation	10

CompTIA A+ Certified Technician Preparation CA71

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
	Minimum Credit Hours for Graduation	21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and

techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Minimum Credit Hours for Graduation		26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
	CIST 2371 or CIST 2742	4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
	Guided Electives (4 credits)	4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4
	Minimum Credit Hours for Graduation	16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
	Minimum Credit Hours for Graduation	16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

CIST 1001	Computer Concepts	4
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3
CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
	Minimum Credit Hours for Graduation	11

Cyber & Related Course Descriptions

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security

Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps

Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms

Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software

Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting

Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security

Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy

Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies

Credits 4

Prerequisites

[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint

Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers

Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing

Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented

Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data

Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases

Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management

Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.

Credits 4

Prerequisites

CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

CIS 2321

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role playing exercises that students complete while developing their network upgrade proposals.

Credits 4

Prerequisites

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4

CIST 2452 : CISCO Switching, Routing, & Wiring Essentials

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4

Prerequisites

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4

Prerequisites

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security. Students will acquire the skills needed to design, implement, and support network security

Credits 4

CIST 2480 : AWS Cloud Foundations

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4

Prerequisites

CIST 1601

CIST 2742 : Beginning Python Programming

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4

CIST 2921 : It Analysis Design & Project Management

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4

CIST 2991 : Cist Internship I (Capstone)

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3

Guided Elective

Credits 4

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
Minimum Credit Hours for Graduation		47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
Minimum Credit Hours for Graduation		9

Diesel Electrical & Electronic Systems Technician DE11

Type

Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
Minimum Credit Hours for Graduation		10

Diesel Engine Service Technician DE21

Type

Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
Minimum Credit Hours for Graduation		16

Diesel Truck Maintenance Technician DTM1

Type

Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
Minimum Credit Hours for Graduation		23

Heavy Diesel Service Technician HD31

Type

Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
Minimum Credit Hours for Graduation		31

Diesel Technology Course Descriptions

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3

DIET 1010 : Diesel Electrical/Electronics

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7

Prerequisites

DIET 1000

DIET 1020 : Preventive Maintenance

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5

Prerequisites

DIET 1010

DIET 1030 : Diesel Engines

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6

Prerequisites

DIET 1010

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.

Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors.

Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.

Credits 3

DRFT - Drafting

Drafting Technology DT13 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must select and complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
Occupationally Related Electives		
Minimum Credit Hours for Graduation		60

Drafting Technology DT12 (NO Longer Accepting Students)

Type

Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

* Students must complete one of the following specializations:

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31

Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

Drafting Course Descriptions

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

Credits 4

DFTG 1109 : Auxiliary Views/Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program

emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
	Minimum Credit Hours for Graduation	72

Early Childhood Care and Education ECC2

Type

Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
	EMPL 1000 or PSYC 1010	2-3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
	Minimum Credit Hours for Graduation	53

Child Development Specialist CD61

Type

Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
	ECCE 1121 or EMPL 1000	2-3
	Minimum Credit Hours for Graduation	14

Early Childhood Care and Education Basics EC31

Type

Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
	Minimum Credit Hours for Graduation	9

Early Childhood Care Education Course Descriptions

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

Credits 3

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

Credits 3

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children's creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children's creative development; facilitation of children's creative expression, media, methods and materials across the curriculum; appreciation of children's art processes and products; appreciation of children's creativity in music, movement and dance; appreciation of children's creative expression in play and creative drama; and art and music appreciation.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children's literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children's families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children's development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

Economics Course Descriptions

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective

Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

Credits 3

EDUC - Education

Education ED13**Type**

Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful

employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

* **Students** - Choose from and complete either STEM Specialization:

- Math Concentration (16 hrs)
- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education Paraprofessional EP11

Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
	Minimum Credit Hours for Graduation	14

Education Course Descriptions

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.

Credits 3

Prerequisites

ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.

Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type

Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3

ELTR 1180	Electrical Controls	4
Specific Occupational-Guided Electives (3 credits)		3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3
Specific Occupational-Guided Electives (3 credits)		3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
Specific Occupational-Guided Electives (3 credits)		3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		
Minimum Credit Hours for Graduation		54

NCCER Basic Electrical Systems Technician, BES1

Type

Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
Minimum Credit Hours for Graduation		12

Electrical Construction and Maintenance Course Descriptions

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

Electrical Systems Course Descriptions

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and smirches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type

Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type

Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2

- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Occupational Elective (3 hrs)	3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3
ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4
BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
Minimum Credit Hours for Graduation		54

Basic Electricity Technician BE31

Type

Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
Minimum Credit Hours for Graduation		13

Basic Electronic Assembler BE41

Type

Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
Minimum Credit Hours for Graduation		10

Digital Electronics Technician DET1

Type

Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2
Minimum Credit Hours for Graduation		13

Electrical Lineworker with Pintle Hook Restriction EL21

Type

Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
Minimum Credit Hours for Graduation		13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		10

Electronics Technology Course Descriptions

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars. Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics-Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1

ECET 1191	Computer Programming Fundamentals	3
ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

Electronics-Computer Engineering Technology Course Descriptions

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.

Credits 3

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13
- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3
ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following courses and the corresponding lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
Guided Electives - 9 Credit Hours		9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4
DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
MET Occupation Courses - minimum 9 credits		9
Guided Electives 3+		3
Minimum Credit Hours for Graduation		63

Engineering Technology Basics EBT1

Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

*** Students must choose one of the following options:**

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
Minimum Credit Hours for Graduation		20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
Minimum Credit Hours for Graduation		13

Engineering Technology Course Descriptions

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

English Course Descriptions

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3

Prerequisites

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3

Prerequisites

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3

Prerequisites

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3

Prerequisites

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3

Prerequisites

ENGL 1101

ARTS - Fine Arts

Fine Arts Course Descriptions

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3

SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6
Guided Electives 3+		3

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
Minimum Credit Hours for Graduation		62

Forestry Technology FT12

Type

Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The

technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
Minimum Credit Hours for Graduation		52

Basic Timber Harvesting BT41

Type

Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3

THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
Minimum Credit Hours for Graduation		12

Forestry Technician Assistant FTA1

Type

Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4
FORS 1160	Forest Surveying and Mapping	4
Minimum Credit Hours for Graduation		14

Land Surveying Technician LST1

Type

Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
Minimum Credit Hours for Graduation		14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
Minimum Credit Hours for Graduation		18

Forestry Course Descriptions

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

THOP 1105 : Timber Harvest Equip Oper I

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3

Prerequisites

THOP 1101

THOP 1106 : Timber Harvest Equip Oper II

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3

Prerequisites

THOP 1105

General Business

General Business GB13

Type

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1120	Spreadsheet Applications	4
ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
	Minimum Credit Hours for Graduation	68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation

60

General Business Course Descriptions

General Studies Area III Elective : 3 or 4 hrs

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

Government Course Descriptions

POLS 1101 : American Government

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

History Course Descriptions

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980.

Credits 3

HORT - Horticulture

Horticulture EH13

Type

Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization - 8GH3
- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Specific Occupational-Guided Electives (3 credits)	3
Specific Occupational-Guided Electives (3 credits)	3
Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits
HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type

Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
Guided Electives		

Landscape Management Specialization — 15 Hours

Item #	Name	Credits
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
Guided Electives		
Minimum Credit Hours for Graduation		45

Floral Designer FD11

Type

Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
HORT Elective (4hrs)		4
Minimum Credit Hours for Graduation		15

Garden Center Technician GC31

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required

For Admissions: No

For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits

HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3
Minimum Credit Hours for Graduation		12

Landscape Specialist LS11

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
Minimum Credit Hours for Graduation		17

Nursery/Greenhouse Technician PPS1

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
Minimum Credit Hours for Graduation		17

Horticulture Course Descriptions

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.

Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.

Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective

Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

Humanities Course Descriptions

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

Electrical Control Systems EC22**Type**

Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	44

Industrial Mechanical Systems IMS2

Type

Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
Occupational Electives (11 hrs)		11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3
IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
Minimum Credit Hours for Graduation		51

Industrial Systems Technology IST4

Type

Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
MATH 1012 or MATH 1013		3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF11

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM41

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
	Minimum Credit Hours for Graduation	12

Manufacturing Maintenance Fundamentals MM11

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
Minimum Credit Hours for Graduation		12

Industrial Systems Course Descriptions

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012](#)/[MATH 1012](#)/MAT 102 or [MATH 1013](#)/MAT 1013/MAT 103.

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109	3

Area II - Social/Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3

BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation	61

EMPL - Job Acquisition Skills

Job Acquisition Skills Course Descriptions

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2

Prerequisites

Effective Summer 2024 (202416) - Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type

Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
Occupational Guided Electives (6 hrs)		6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6
	Minimum Credit Hours for Graduation	45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
Minimum Credit Hours for Graduation		22

Metals Technician ME31

Type

Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4
WELD 1090	Gas Metal Arc Welding	4
Minimum Credit Hours for Graduation		20

Machine Tool Course Descriptions

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4

MCHT 1012 : Blueprint for Machine Tool

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3

MCHT 1013 : Machine Tool Math

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3

Prerequisites

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals.

Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4

MCHT 1020 : Heat Treatment & Surface Grinding

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders.

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

Management Course Descriptions

MGMT 1100 : Principles of Management

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

MGMT 1105 : Organizational Behavior

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

MGMT 1110 : Employment Rules & Regulations

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3

MGMT 2125 : Performance Management

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3

MGMT 2130 : Employee Training & Development

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

Credits 3

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits
MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
Minimum Credit Hours for Graduation		15

Marine Engine Technology Course Descriptions

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4

Prerequisites

MAET 1000

MAET 1150 : Marine Accessories

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4

Prerequisites

MAET 1000

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

*** Students must choose one of the following Specializations:**

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4

MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
Elective (3 credits +)		3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
Marketing Elective		3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
Minimum Credit Hours for Graduation		63

Marketing Management MM12

Type
Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2
- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Guided Electives 3+	3

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 2120, or MKTG 1130	3
	Minimum Credit Hours for Graduation	24

Marketing Course Descriptions

Guided Elective - Marketing

[MGMT 1100](#)

OR

[MKTG 1130](#)

[ACCT 2140](#)

[PARA 1150](#)

Credits 3

MGMT 2115 : Human Resource Management

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

Credits 3

MKTG 1100 : Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.

Credits 3

MKTG 1130 : Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3

MKTG 1160 : Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3

MKTG 1161 : Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

Mathematics Course Descriptions

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 & minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

Mechanical Engineering Course Descriptions

MEGT 1010 : Manufacturing Process

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

MEGT 1321 : Machining and Welding

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2

Prerequisites

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3

Prerequisites

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4

Prerequisites

MEGT 2030

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce

academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
Minimum Credit Hours for Graduation		53

Medical Assisting Course Descriptions

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant*s role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

Credits 2

MAST 1030 : Pharmacology in the Medical Office

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

Credits 4

Prerequisites

Program Admission, MATH 1012.

MAST 1060 : Medical Office Procedures

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.

Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.

Credits 4

Prerequisites

Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Further student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.

Credits 4

Prerequisites

Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2

Prerequisites

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

Naval Apprentice

Naval Electrician Apprentice EW11

Type

Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprentice TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprentice TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Naval Machine Tool Apprentice NM51

Type

Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4
Minimum Credit Hours for Graduation		28

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3
WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
	Occupational Elective (3 hrs)	3
Minimum Credit Hours for Graduation		26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4
NEUT 1010	Neural Science	120 4
NEUT 1020	Pathology/Neuromuscular Therapy	3
NEUT 1030	Neuromuscular Therapy Fundamentals	3
NEUT 1050	Technique and Theory I	5
NEUT 1060	Clinic I	2
NEUT 1080	Techniques and Theory III	90 3
NEUT 1081	Techniques and Theory III	3

NEUT 1100	Adjunctive Modalities		3
NEUT 1110	Licensure Review		3
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy		2
Minimum Credit Hours for Graduation			57

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort Program - Accepting Students Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3
THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4
NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation			36

Neuromuscular Massage Therapy Course Descriptions

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/ Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90

Credits 3

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/ Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90

Credits 3

THMT 1002 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1006 : Pathology for Massage Therapist

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60

Credits 2

Prerequisites

Program Admission

THMT 1101 : Fundamentals of Massage II

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1102 : Technique and Theory II

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

NAST - Nurse Aide

Nurse Aide Course Descriptions

NAST 1100 : Nurse Aide Fundamentals

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

NAST 2100 : Nurse Aide Accelerated

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7

Corequisites

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73

Type

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1% Combined 1st Time Test Takers and Repeaters

Program Completion Rate: 100% (29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate nursing program is Initial Accreditation.

Links:

[Program Handbook](#)

[ASN Competitive Admissions Guide](#)

Competitive Admissions Program Application:

[ASN Program Application](#)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the following (not already taken in Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7
RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
Minimum Credit Hours for Graduation		67

Nursing (ASN) Course Descriptions

RNSG 2021 : Fundamentals of Nursing

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities, growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6

Prerequisites

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3

Prerequisites

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

RNSG 2029

RNSG 2031

PARA - Paralegal Studies

Paralegal Studies PS13**Type**

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA 2210	6

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
	Minimum Credit Hours for Graduation	69

Paralegal Studies PS12

Type

Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
	Minimum Credit Hours for Graduation	38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
Minimum Credit Hours for Graduation		12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits
PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
PARA XXXX- Paralegal Electives (3 credits)		3

PARA XXXX- Paralegal Electives (3 credits)	3
Minimum Credit Hours for Graduation	30

Paralegal Studies Course Descriptions

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks. The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3

Corequisites

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3

Corequisites

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6

Prerequisites

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3

Prerequisites

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6

Prerequisites

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences.

Realistic work situations are used to provide students with in-sights into paralegal applications on the job.

Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6

Prerequisites

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMS Professions EP12**Type**

Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type
Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709

Seminole, FL 33775

Phone: (727) 210-2350

Fax: (727) 210-2354

Website Link <https://www.caahep.org/>

CoAEMSP

8301 Lakeview Parkway, Suite 111-312

Rowlett, TX 75088

Phone: (214) 703-8445

Fax: (214) 703-8992

Website Link <https://coaemsp.org/>

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits

ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2
EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic Vi	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
Minimum Credit Hours for Graduation		58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful

completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		10

Emergency Medical Responder (EMR), EB71

Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4

ALHS 1090	Medical Terminology for AHS	2
	Minimum Credit Hours for Graduation	11

Emergency Medical Technician (EMT) EMJ1

Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
	Minimum Credit Hours for Graduation	16

Pre-hospital EMS Operations PEO1

Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced

emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		26

Paramedicine Course Descriptions

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardio-pulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1

EMSP 1510 : Advanced Concepts for the AEMT

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3

EMSP 1520 : Advanced Patient Care for the AEMT

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3

Corequisites

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1

Corequisites

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5

Corequisites

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4

Prerequisites

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2550

EMSP 2560

EMSP 2710

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
Minimum Credit Hours for Graduation		24

Phlebotomy Course Descriptions

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3

Prerequisites

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

Physics Course Descriptions

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

Behavioral Health Technician BHT1**Type**

Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
Minimum Credit Hours for Graduation		12

Geriatric Care Assistant GC51

Type

Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals		6-7
Minimum Credit Hours for Graduation			18-19

Health Care Assistant HA21

Type

Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

* Students must complete one of the listed specializations

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits

ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2	
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
	Minimum Credit Hours for Graduation	30-31

Nurse Aide CN21

Type

Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services. Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
NAST 1100	Nurse Aide Fundamentals	6
Minimum Credit Hours for Graduation		13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/ patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
Minimum Credit Hours for Graduation		3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the

needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.

<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3
PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
Minimum Credit Hours for Graduation		49

Practical Nursing and Related Course Descriptions

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology

Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system

Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education

Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.

Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.

Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.

Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.

Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.
Credits 5

PSYC - Psychology

Psychology Course Descriptions

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.
Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.
Credits 3

RADT - Radiologic Technology

Radiologic Technology RT23

Type

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
Minimum Credit Hours for Graduation		77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
Minimum Credit Hours for Graduation		25

Radiologic Technology Course Descriptions

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4

Prerequisites

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3

Prerequisites

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3

Prerequisites

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2

Prerequisites

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4

Prerequisites

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3

Prerequisites

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2

Prerequisites

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3

Prerequisites

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

*** Students must complete one of the Specializations below:**

- Mechanical Specialization 8M33
- Electrical Specialization 8E43

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair Systems Technology diploma prepares students for a career in the railroad/ locomotive industry as a Car Repairman, Sheet Metal Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type

Diploma

The Locomotive Electrical/Mechanical Technology program will prepare students for employment in the railroad industries. Students will gain skills to become locomotive electricians, locomotive mechanics, car repairman, and sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		58

Locomotive Car Repair Technician LCR1

Type

Technical Certificate of Credit

Diagnose, adjust, repair, or overhaul railroad cars. Students will become familiar with the rail industry; knowledge of locomotives (EMD and GE) and locomotive air brake systems; Department of Transportation and FRA rules and OSHA regulations; fundamental concepts and operations of locomotive mechanical systems. Students will be proficient with safety practices, equipment, and techniques necessary for metal heating and cutting principles; cutting torches and apparatus; metal heating techniques; metal cutting techniques; manual and automatic oxyfuel cutting techniques; oxyfuel pipe cutting; reading welding and related blueprints and sketches; shielded metal arc welding (SMAW) in flat positions; horizontal SMAW safety and health practices; selection and applications of electrodes, selection and applications for horizontal SMAW; horizontal SMAW joints; techniques required for shielded metal arc welding (SMAW) in the vertical position; selection and

applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification; overhead SMAW safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
Minimum Credit Hours for Graduation		17

Railroad Industry Course Descriptions

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.

Credits 3

Prerequisites

SCMA 1003

READ - Reading Writing

Reading Writing Course Descriptions

READ 0090 : Learning Support Reading I

No description available at this time.

Credits 3

READ 0091 : Learning Support Reading II

Credits 3

Prerequisites

minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

Religion Course Descriptions

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.

Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists. (RRTs). **The standards for the program can be viewed by clicking [here](#).**

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
<http://www.coarc.com/>

CoARC Program Number: 200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."
[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3

BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
Minimum Credit Hours for Graduation		78

Respiratory Care Course Descriptions

RESP 1110 : Pharmacology

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

[BIOL 2114](#)

[BIOL 2114L](#)

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1

Prerequisites

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1

Prerequisites

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3

Prerequisites

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3

Prerequisites

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Prerequisites

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2

Corequisites

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

Sociology Course Descriptions

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

Spanish Course Descriptions

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

Speech Course Descriptions

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
Minimum Credit Hours for Graduation		72

Surgical Technology Course Descriptions

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

BIOL 2117

BIOL 2117L

MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2130 : Surg Tech Clinical III

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2140 : Surg Tech Clinical IV

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2240 : Seminar in Surgical Technology

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.

Credits 2

THEA - Theater Appreciation

Theater Appreciation Course Descriptions

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.

Credits 3

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type

Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
	Program Electives (6 hrs)	6
	Minimum Credit Hours for Graduation	54

Advanced Shielded Metal Arc Welder, OSM1

Type

Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4

WELD 1070	Overhead Shield Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Basic Shielded Metal Arc Welder FS31

Type

Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Gas Metal Arc Welder GM31

Type

Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3
	Minimum Credit Hours for Graduation	15

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	15

Welding and Joining Technology Course Descriptions

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.

Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.

Credits 4

Corequisites

WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Corequisites

WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1090

WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1050

WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Programs of Study

ACCT - Accounting

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis, Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance. Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.

Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.

Credits 4

ASTT - Aircraft Structural Technology

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment. Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.

Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.

Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems

Credits 2

AUTT 1011 : Basic Auto Maintenance and Light Repair

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.

Credits 6

Corequisites

AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.

Credits 6

Prerequisites

AUTT 1010

AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.

Credits 6

Prerequisites

AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.

Credits 3

Corequisites

AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.

Credits 7

Prerequisites

AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.

Credits 4

Prerequisites

AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.

Credits 7

Prerequisites

AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.

Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.

Credits 3

Corequisites

AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.

Credits 4

Prerequisites

AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.

Credits 4

Prerequisites

AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

Credits 4

Prerequisites

AVIO 1040

FISH - Basic Commercial Fisherman

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.

Credits 3

Prerequisites

Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel. Topics include weather reading, radio communication, and signals and navigation of the vessel.

Credits 3

Prerequisites

Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region. Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.

Credits 3

Prerequisites

Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation. Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.

Credits 3

Prerequisites

Program Admission.

BIOL - Biology

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 3

Corequisites

BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is intended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BCST - Business Technology

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

BUSN 1000 or COMP 1000 : Computers in Healthcare Or Intro to Computer Literacy**[BUSN 1000](#)**

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

[COMP 1000](#)

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

BUSN 1010 : Medical Terminology, Anatomy, and Diseases for Business

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

BUSN 1015 : Introduction to Healthcare Reimbursement

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:

[ALHS 1090](#), or [BUSN 1010](#), or [BUSN 2300](#)

BUSN 1100 : Introduction to Keyboarding

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

BUSN 1190 : Digital Technologies in Business

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

BUSN 1300 : Introduction to Business

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

BUSN 1340 : Customer Service Effectiveness

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4

Prerequisites

COMP 1000

BUSN 1410 : Spreadsheet Concepts & Applications

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4

Prerequisites

COMP 1000

BUSN 1420 : Database Applications

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4

Prerequisites

COMP 1000

BUSN 1430 : Desktop Publishing & Presentation Applications

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4

Prerequisites

COMP 1000

BUSN 1440 : Document Production

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4

Prerequisites

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites

COMP 1000

BUSN 1800 : Introduction to Healthcare Accounting

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2

Prerequisites

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2

Prerequisites

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3

Prerequisites

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts

Credits 4

BUSN 2210 : Applied Office Procedures

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)

BUSN 2230 : Office Management

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3

Prerequisites

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

BUSN 2250 : Business Administrative Assistant Internship II

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

BUSN 2290 : Applied Business Technology

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.

Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.

Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.

Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

Credits 4

Prerequisites

BUSN 2320

BUSN 2340 : Healthcare Administrative Procedures

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4

Prerequisites

BUSN 1010

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

BUSN 1440

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3

Prerequisites

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3

Prerequisites

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites

BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations.

Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3

Prerequisites

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).

BUSN 2850 : Health Record Auditing

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans.

Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3

Prerequisites

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)

COMP 1000 : Introduction to Computer Literacy

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

MGMT 1120 : Introduction to Business

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3

MGMT 2210 : Project Management

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3

MKTG 2500 : Exploring Social Media

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3

Corequisites

MKTG 1100

Carpentry

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3

CARP 1015 : Structural Framing I

Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

CHEM - Chemistry

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit

Credits 2

CTDL - Commercial Truck Driving

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safely on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4

Corequisites

CTDL 1021

COMM - Communication

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication.

Credits 3

COFC - Construction

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2

Prerequisites

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry

Credits 3

COFC 1020 : Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup

Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules

Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills

Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.

Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.

Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.

Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.

Credits 4

Corequisites

COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.

Credits 4

Corequisites

COFC 1080

COSM - Cosmetology

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites

COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites

COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites

COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites

COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites

COSM 1000

COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

COSM 1090 : Hair Services Practicum I

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000

COSM 1010

COSM 1020

COSM 1030

COSM 1040

COSM 1050

COSM 1100 : Hair Services Practicum II

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

COSM 1110 : Hair Services Practicum III

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

COSM 1115 : Hair Services Practicum IV

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2

Corequisites

COSM 1110

COSM 1120 : Salon Management

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3

Corequisites

COSM 1000

COSM 1125 : Skin & Nail Care Practicum

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2

Corequisites

COSM 1060

COSM 1070

CRJU - Criminal Justice

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3

CRJU 1021 : Private Security

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3

CRJU 1030 : Corrections

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3

CRJU 1040 : Principles of Law Enforcement

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3

CRJU 1043 : Probation and Parole

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3

CRJU 1050 : Police Patrol Operations

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3

CRJU 1052 : Criminal Justice Admin.

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security

Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps

Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms

Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software

Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting

Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security

Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy

Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies

Credits 4

Prerequisites

[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint

Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers

Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing

Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented

Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data

Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases

Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management

Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.

Credits 4

Prerequisites

CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

CIS 2321

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role playing exercises that students complete while developing their network upgrade proposals.

Credits 4

Prerequisites

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4

CIST 2452 : CISCO Switching, Routing, & Wiring Essentials

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4

Prerequisites

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4

Prerequisites

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security. Students will acquire the skills needed to design, implement, and support network security

Credits 4

CIST 2480 : AWS Cloud Foundations

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4

Prerequisites

CIST 1601

CIST 2742 : Beginning Python Programming

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4

CIST 2921 : It Analysis Design & Project Management

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4

CIST 2991 : Cist Internship I (Capstone)

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3

Guided Elective

Credits 4

DIET - Diesel Technology

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3

DIET 1010 : Diesel Electrical/Electronics

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7

Prerequisites

DIET 1000

DIET 1020 : Preventive Maintenance

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5

Prerequisites

DIET 1010

DIET 1030 : Diesel Engines

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6

Prerequisites

DIET 1010

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.

Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors.

Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.

Credits 3

DRFT - Drafting

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

Credits 4

DFTG 1109 : Auxiliary Views/Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

Credits 3

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

Credits 3

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children's creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children's creative development; facilitation of children's creative expression, media, methods and materials across the curriculum; appreciation of children's art processes and products; appreciation of children's creativity in music, movement and dance; appreciation of children's creative expression in play and creative drama; and art and music appreciation.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children's literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children's families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children's development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective

Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

Credits 3

EDUC - Education

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.

Credits 3

Prerequisites

ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.

Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and smirches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars. Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics-Computer Engineering Technology

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.

Credits 3

ECET - Engineering Technology

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3

Prerequisites

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3

Prerequisites

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3

Prerequisites

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3

Prerequisites

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3

Prerequisites

ENGL 1101

ARTS - Fine Arts

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

THOP 1105 : Timber Harvest Equip Oper I

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3

Prerequisites

THOP 1101

THOP 1106 : Timber Harvest Equip Oper II

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3

Prerequisites

THOP 1105

General Business

General Studies Area III Elective : 3 or 4 hrs

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

POLS 1101 : American Government

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980.

Credits 3

HORT - Horticulture

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.

Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.

Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective
Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012](#)/[MATH 1012](#)/MAT 102 or [MATH 1013](#)/MAT 1013/MAT 103.

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

EMPL - Job Acquisition Skills

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2**Prerequisites**

Effective Summer 2024 (202416) - Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4**MCHT 1012 : Blueprint for Machine Tool**

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3**MCHT 1013 : Machine Tool Math**

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3**Prerequisites**

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals.

Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4**MCHT 1020 : Heat Treatment & Surface Grinding**

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders.

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

MGMT 1100 : Principles of Management

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

MGMT 1105 : Organizational Behavior

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

MGMT 1110 : Employment Rules & Regulations

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3

MGMT 2125 : Performance Management

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3

MGMT 2130 : Employee Training & Development

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

Credits 3

MAET - Marine Engine Technology

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4

Prerequisites

MAET 1000

MAET 1150 : Marine Accessories

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4

Prerequisites

MAET 1000

MKTG - Marketing

Guided Elective - Marketing

[MGMT 1100](#)

OR

[MKTG 1130](#)

[ACCT 2140](#)

[PARA 1150](#)

Credits 3

MGMT 2115 : Human Resource Management

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

Credits 3

MKTG 1100 : Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.

Credits 3

MKTG 1130 : Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3

MKTG 1160 : Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3

MKTG 1161 : Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 & minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

MEGT 1010 : Manufacturing Process

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

MEGT 1321 : Machining and Welding

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2

Prerequisites

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3

Prerequisites

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4

Prerequisites

MEGT 2030

MAST - Medical Assisting

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant's role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

Credits 2

MAST 1030 : Pharmacology in the Medical Office

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

Credits 4

Prerequisites

Program Admission, MATH 1012.

MAST 1060 : Medical Office Procedures

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.

Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.

Credits 4

Prerequisites

Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Further student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.

Credits 4

Prerequisites

Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2

Prerequisites

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

NEUT - Neuromuscular Massage Therapy

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/ Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90

Credits 3

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/ Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90

Credits 3

THMT 1002 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1006 : Pathology for Massage Therapist

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60

Credits 2

Prerequisites

Program Admission

THMT 1101 : Fundamentals of Massage II

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1102 : Technique and Theory II

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

NAST - Nurse Aide

NAST 1100 : Nurse Aide Fundamentals

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

NAST 2100 : Nurse Aide Accelerated

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7

Corequisites

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3

RNSG - Nursing (ASN)

RNSG 2021 : Fundamentals of Nursing

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities, growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6

Prerequisites

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3

Prerequisites

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

RNSG 2029

RNSG 2031

PARA - Paralegal Studies

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks. The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3

Corequisites

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3

Corequisites

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6

Prerequisites

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3

Prerequisites

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6

Prerequisites

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Realistic work situations are used to provide students with in-sights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6

Prerequisites

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardio-pulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1

EMSP 1510 : Advanced Concepts for the AEMT

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3

EMSP 1520 : Advanced Patient Care for the AEMT

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3

Corequisites

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1

Corequisites

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5

Corequisites

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4

Prerequisites

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2550

EMSP 2560

EMSP 2710

PHLT - Phlebotomy

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3

Prerequisites

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology

Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system

Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education

Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.

Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.

Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.

Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.

Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.
Credits 5

PSYC - Psychology

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.
Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.
Credits 3

RADT - Radiologic Technology

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4

Prerequisites

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3

Prerequisites

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3

Prerequisites

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2

Prerequisites

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4

Prerequisites

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3

Prerequisites

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2

Prerequisites

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3

Prerequisites

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.

Credits 3

Prerequisites

SCMA 1003

READ - Reading Writing

READ 0090 : Learning Support Reading I

No description available at this time.

Credits 3

READ 0091 : Learning Support Reading II

Credits 3

Prerequisites

minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.

Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

RESP 1110 : Pharmacology

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1

Prerequisites

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1

Prerequisites

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3

Prerequisites

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3

Prerequisites

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Prerequisites

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2

Corequisites

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

BIOL 2117

BIOL 2117L

MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2130 : Surg Tech Clinical III

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2140 : Surg Tech Clinical IV

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2240 : Seminar in Surgical Technology

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.

Credits 2

THEA - Theater Appreciation

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.

Credits 3

WELD - Welding and Joining Technology

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.

Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.

Credits 4

Corequisites

WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Corequisites

WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1090

WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1050

WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

ACCT - Accounting

Accounting AC13

Type

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
Minimum Credit Hours for Graduation		64

Accounting AC12

Type

Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
Minimum Credit Hours for Graduation		42-43

Office Accounting Specialist OA31

Type

Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
Minimum Credit Hours for Graduation		14

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type

Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		51

Advanced Commercial Refrigeration AC81

Type

Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
Minimum Credit Hours for Graduation		12

Air Conditioning Electrical Technician ACK1

Type

Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
Minimum Credit Hours for Graduation		12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
Minimum Credit Hours for Graduation		20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
Minimum Credit Hours for Graduation		12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Minimum Credit Hours for Graduation		16

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., Please Click Here.

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
Minimum Credit Hours for Graduation		12

Automotive Collision Repair Assistant II AZ51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71

Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
Minimum Credit Hours for Graduation		10

AUTT - Automotive Technology

Automotive Fundamentals AF12

Type

Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		40

Automotive Technology AT14

Type

Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		55

Auto Electrical/Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
Minimum Credit Hours for Graduation		9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/Steering Systems	4
Minimum Credit Hours for Graduation		17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7
Minimum Credit Hours for Graduation		16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
Minimum Credit Hours for Graduation		15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

*** Dual Enrollment Only**

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6

AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
Minimum Credit Hours for Graduation		20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
Minimum Credit Hours for Graduation		8

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1

Type

Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
Minimum Credit Hours for Graduation		27

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1

Type

Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region. Commercial fishermen in Georgia use a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

* Dual Enrollment Only

Required Courses — 12 Hours

Item #	Name	Credits
FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3
Minimum Credit Hours for Graduation		12

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type

Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides

learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

*** Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization**

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3

BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3
BUSN 2850	Health Record Auditing	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
	Guided Electives	
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2

Type

Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3

BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
Occupational-Guided Electives (7 hrs)		7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
Minimum Credit Hours for Graduation		46

Healthcare Billing and Coding Specialist HBC1

Type

Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		31

Healthcare Billing and Reimbursement Assistant HBA1

Type

Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		18

Healthcare Office Assistant HFA1

Type

Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
Specific Occupational-Guided Electives (6 credits)		6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
Minimum Credit Hours for Graduation		64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits

MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4
	Select BUSN 2375 or BUSN 2370	3
	Select ALHS 1010, ALHS 1011, or BUSN 2310	3
	Select BUSN 2300 or ALHS 1090	2
	Electives (9 credits)	9
	Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type

Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type

Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		14

Technical Specialist TC31

Type

Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
Occupationally Related Electives		

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Minimum Credit Hours for Graduation	30-39

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61

Type

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

COFC - Construction

Basic Electrical Technician BE11

Type

Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		13

Certified Construction Worker CCW1

Type

Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

* Select Option 1 or Option 2

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
	Minimum Credit Hours for Graduation	9

NCCER Carpentry Fundamentals, CF21

Type

Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type

Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits
ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4
Minimum Credit Hours for Graduation		12

NCCER Plumber's Assistant BP11

Type

Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
Minimum Credit Hours for Graduation		12

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type

Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work

ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills,

and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		44

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED Required:

For Admission: No

For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits

COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
Minimum Credit Hours for Graduation		36

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques, reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	3
COSM 1120	Salon Management	3

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		12

CRJU - Criminal Justice

AS Criminal Justice, AF63

Type

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a

combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type

Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
	CRJU 2090 or CRJU 2100	3

Occupational Electives — 15 Hours

Item #	Name	Credits
CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3
CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3

CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
Minimum Credit Hours for Graduation		60

Criminal Justice Technology CJT2

Type

Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
CRJU 2090 or CRJU 2100		3

Occupational Electives — 9 Hours

Item #	Name	Credits
	CRJU Occupational Electives (9 hrs)	9
Minimum Credit Hours for Graduation		48

Crime Scene Fundamentals CZ31

Type

Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
Minimum Credit Hours for Graduation		12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
Minimum Credit Hours for Graduation		15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for

successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 2050	Criminal Procedure	3
Minimum Credit Hours for Graduation		12

CUUL - Culinary Arts

Prep Cook PC51

Type

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

* High School Admissions Only

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
Minimum Credit Hours for Graduation		12

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3

Cybersecurity CY13

Type

Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits

ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Guided Electives (4 credits)		4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	66

Computer Support Specialist CS14

Type

Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		55-56

Cybersecurity CY12

Type

Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIS Networking Electives (8 hrs)		8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type

Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

***Choose either the Microsoft or the Cisco Specialization**

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST Electives (9 credits)		9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits

CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO
CIST 2452	CISCO Switching, Routing, & Wiring Essentials
CIST 2453	Enterprise Networking, Security, and Automation
Guided Elective	4

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4
	Minimum Credit Hours for Graduation	54-55

AWS Cloud Solutions Specialist AA91

Type

Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	16

Cisco Network Specialist CN71

Type

Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits	
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
Guided Elective	4	
Minimum Credit Hours for Graduation		16

CompTIA A+ Certified Preparation CA61

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
Minimum Credit Hours for Graduation		10

CompTIA A+ Certified Technician Preparation CA71

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
	Guided Electives (4 credits)	4
Minimum Credit Hours for Graduation		18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
Minimum Credit Hours for Graduation		21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Minimum Credit Hours for Graduation		26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
	CIST 2371 or CIST 2742	4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
Guided Electives (4 credits)		4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4
Minimum Credit Hours for Graduation		16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
Minimum Credit Hours for Graduation		16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1130 or CIST 1135		3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3
CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
Minimum Credit Hours for Graduation		11

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
Minimum Credit Hours for Graduation		47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
Minimum Credit Hours for Graduation		9

Diesel Electrical & Electronic Systems Technician DE11

Type

Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
Minimum Credit Hours for Graduation		10

Diesel Engine Service Technician DE21

Type

Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
Minimum Credit Hours for Graduation		16

Diesel Truck Maintenance Technician DTM1

Type

Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
Minimum Credit Hours for Graduation		23

Heavy Diesel Service Technician HD31

Type

Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
Minimum Credit Hours for Graduation		31

DRFT - Drafting

Drafting Technology DT13 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and

reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must select and complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Occupationally Related Electives	

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3

DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
Occupationally Related Electives		
Minimum Credit Hours for Graduation		60

Drafting Technology DT12 (NO Longer Accepting Students)

Type

Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

*** Choose one of the following:**

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31

Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCL 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
Minimum Credit Hours for Graduation		72

Early Childhood Care and Education ECC2

Type

Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000 or PSYC 1010		2-3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3

ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
Minimum Credit Hours for Graduation		53

Child Development Specialist CD61

Type

Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1121 or EMPL 1000		2-3
Minimum Credit Hours for Graduation		14

Early Childhood Care and Education Basics EC31

Type

Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3

EDUC - Education

Education ED13

Type

Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

* **Students** - Choose from and complete either STEM Specialization:

- Math Concentration (16 hrs)
- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education Paraprofessional EP11

Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
Minimum Credit Hours for Graduation		14

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type
Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3
ELTR 1180	Electrical Controls	4
Specific Occupational-Guided Electives (3 credits)		3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3
Specific Occupational-Guided Electives (3 credits)		3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
	Specific Occupational-Guided Electives (3 credits)	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	54

NCCER Basic Electrical Systems Technician, BES1

Type

Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
	Minimum Credit Hours for Graduation	12

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type

Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type

Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2
- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits

ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
Occupational Elective (3 hrs)		3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3
ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors & Robotics	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4

BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
Minimum Credit Hours for Graduation		54

Basic Electricity Technician BE31

Type

Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
Minimum Credit Hours for Graduation		13

Basic Electronic Assembler BE41

Type

Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
Minimum Credit Hours for Graduation		10

Digital Electronics Technician DET1

Type

Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits

ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2
Minimum Credit Hours for Graduation		13

Electrical Lineworker with Pintle Hook Restriction EL21

Type

Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
Minimum Credit Hours for Graduation		13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		10

UAST - Electronics-Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1
ECET 1191	Computer Programming Fundamentals	3
ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13
- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3

ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following courses and the corresponding lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
Guided Electives - 9 Credit Hours		9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4
DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
MET Occupation Courses - minimum 9 credits		9
Guided Electives 3+		3
Minimum Credit Hours for Graduation		63

Engineering Technology Basics EBT1

Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

*** Students must choose one of the following options:**

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
Minimum Credit Hours for Graduation		20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
Minimum Credit Hours for Graduation		13

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4

FORS 2460	Forest Management	6
	Guided Electives 3+	3

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
	Minimum Credit Hours for Graduation	62

Forestry Technology FT12

Type

Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
Minimum Credit Hours for Graduation		52

Basic Timber Harvesting BT41

Type

Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
Minimum Credit Hours for Graduation		12

Forestry Technician Assistant FTA1

Type

Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4
FORS 1160	Forest Surveying and Mapping	4
Minimum Credit Hours for Graduation		14

Land Surveying Technician LST1

Type

Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
Minimum Credit Hours for Graduation		14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
Minimum Credit Hours for Graduation		18

General Business

General Business GB13

Type

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1120	Spreadsheet Applications	4

ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
Minimum Credit Hours for Graduation		68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3

PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation	60

HORT - Horticulture

Horticulture EH13

Type

Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization - 8GH3
- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3

RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits

HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type

Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

* Students must select one of the following specializations:

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
	Guided Electives	

Landscape Management Specialization — 15 Hours

Item #	Name	Credits

HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	Guided Electives	
	Minimum Credit Hours for Graduation	45

Floral Designer FD11

Type

Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	15

Garden Center Technician GC31

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required

For Admissions: No

For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3
	Minimum Credit Hours for Graduation	12

Landscape Specialist LS11

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
Minimum Credit Hours for Graduation		17

Nursery/Greenhouse Technician PPS1

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
Minimum Credit Hours for Graduation		17

IDSY - Industrial Systems

Electrical Control Systems EC22

Type

Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	44

Industrial Mechanical Systems IMS2

Type
Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
	Occupational Electives (11 hrs)	11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3
IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
	Minimum Credit Hours for Graduation	51

Industrial Systems Technology IST4

Type
Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF11

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM41

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits

IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
Minimum Credit Hours for Graduation		12

Manufacturing Maintenance Fundamentals MM11

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
Minimum Credit Hours for Graduation		12

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109		3

Area II - Social/Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
MATH 1101, MATH 1103, or MATH 1111		3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation

61

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type
Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
	Occupational Guided Electives (6 hrs)	6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6
	Minimum Credit Hours for Graduation	45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4

AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
Minimum Credit Hours for Graduation		22

Metals Technician ME31

Type

Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4
WELD 1090	Gas Metal Arc Welding	4
Minimum Credit Hours for Graduation		20

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits
MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
Minimum Credit Hours for Graduation		15

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

*** Students must choose one of the following Specializations:**

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Elective (3 credits +)	3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/Practicum	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	63

Marketing Management MM12

Type

Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2

- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Guided Electives 3+	3

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3
MKTG 2030	Digital Publishing and Design	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 2120, or MKTG 1130	3
Minimum Credit Hours for Graduation		24

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce

academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
Minimum Credit Hours for Graduation		53

Naval Apprenticeship

Naval Electrician Apprentice EW11

Type

Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprenticeship TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprenticeship TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3
Minimum Credit Hours for Graduation		18

Naval Machine Tool Apprentice NM51

Type

Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4
Minimum Credit Hours for Graduation		28

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3

WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4
NEUT 1010	Neural Science	120 4

NEUT 1020	Pathology/Neuromuscular Therapy		3
NEUT 1030	Neuromuscular Therapy Fundamentals		3
NEUT 1050	Technique and Theory I		5
NEUT 1060	Clinic I		2
NEUT 1080	Techniques and Theory III	90	3
NEUT 1081	Techniques and Theory III		3
NEUT 1100	Adjunctive Modalities		3
NEUT 1110	Licensure Review		3
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy		2
Minimum Credit Hours for Graduation			57

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort Program - Accepting Students Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3
THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4

NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation			36

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73

Type

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1% Combined 1st Time Test Takers and Repeaters

Program Completion Rate: 100% (29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326

(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate nursing program is Initial Accreditation.

Links:

[Program Handbook](#)

[ASN Competitive Admissions Guide](#)

Competitive Admissions Program Application:

[ASN Program Application](#)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the following (not already taken in Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7

RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
Minimum Credit Hours for Graduation		67

PARA - Paralegal Studies

Paralegal Studies PS13

Type

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3

HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA 2210	6

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
Minimum Credit Hours for Graduation		69

Paralegal Studies PS12

Type

Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
Minimum Credit Hours for Graduation		38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
Minimum Credit Hours for Graduation		12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits
PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	Minimum Credit Hours for Graduation	30

EMSP - Paramedicine

EMS Professions EP12

Type
Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type

Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709

Seminole, FL 33775

Phone: (727) 210-2350

Fax: (727) 210-2354

Website Link <https://www.caahep.org/>

CoAEMSP

8301 Lakeview Parkway, Suite 111-312

Rowlett, TX 75088

Phone: (214) 703-8445

Fax: (214) 703-8992

Website Link <https://coaemsp.org/>

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2
EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic Vi	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
Minimum Credit Hours for Graduation		58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		10

Emergency Medical Responder (EMR), EB71

Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4
ALHS 1090	Medical Terminology for AHS	2
Minimum Credit Hours for Graduation		11

Emergency Medical Technician (EMT) EMJ1

Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
Minimum Credit Hours for Graduation		16

Pre-hospital EMS Operations PEO1

Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link

from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		26

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
Minimum Credit Hours for Graduation		24

Practical Nursing and Related

Behavioral Health Technician BHT1

Type

Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
Minimum Credit Hours for Graduation		12

Geriatric Care Assistant GC51

Type

Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals		6-7
Minimum Credit Hours for Graduation			18-19

Health Care Assistant HA21

Type

Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

*** Students must complete one of the listed specializations**

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences		2

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
Minimum Credit Hours for Graduation		30-31

Nurse Aide CN21

Type

Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services.

Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
NAST 1100	Nurse Aide Fundamentals	6
Minimum Credit Hours for Graduation		13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
Minimum Credit Hours for Graduation		3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.
<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3
PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
Minimum Credit Hours for Graduation		49

RADT - Radiologic Technology

Radiologic Technology RT23

Type

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
Minimum Credit Hours for Graduation		77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
Minimum Credit Hours for Graduation		25

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

* Students must complete one of the Specializations below:

- Mechanical Specialization 8M33
- Electrical Specialization 8E43

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair Systems Technology diploma prepares students for a career in the railroad/ locomotive industry as a Car Repairman, Sheet Metal Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type

Diploma

The Locomotive Electrical/Mechanical Technology program will prepare students for employment in the railroad industries. Students will gain skills to become locomotive electricians, locomotive mechanics, car repairman, and sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		58

Locomotive Car Repair Technician LCR1

Type

Technical Certificate of Credit

Diagnose, adjust, repair, or overhaul railroad cars. Students will become familiar with the rail industry; knowledge of locomotives (EMD and GE) and locomotive air brake systems; Department of Transportation and FRA rules and OSHA regulations; fundamental concepts and operations of locomotive mechanical systems. Students will be proficient with safety practices, equipment, and techniques necessary for metal heating and cutting principles; cutting torches and apparatus; metal heating techniques; metal cutting techniques; manual and automatic oxyfuel cutting techniques; oxyfuel pipe cutting; reading welding and related blueprints and sketches; shielded metal arc welding (SMAW) in flat positions; horizontal SMAW safety and health practices; selection and applications of electrodes, selection and applications for horizontal SMAW; horizontal SMAW joints; techniques required for shielded metal arc welding (SMAW) in the vertical position; selection and

applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification; overhead SMAW safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
Minimum Credit Hours for Graduation		17

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs). The standards for the program can be viewed by clicking [here](#).

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
<http://www.coarc.com/>

CoARC Program Number: 200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."

[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
Minimum Credit Hours for Graduation		78

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3

ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
Minimum Credit Hours for Graduation		72

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type

Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and

practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
	Program Electives (6 hrs)	6
	Minimum Credit Hours for Graduation	54

Advanced Shielded Metal Arc Welder, OSM1

Type

Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Basic Shielded Metal Arc Welder FS31

Type

Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
Minimum Credit Hours for Graduation		12

Gas Metal Arc Welder GM31

Type

Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		15

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4

Occupational Elective (3 hrs)	3
Minimum Credit Hours for Graduation	15

ACCT - Accounting

Accounting AC13

Type

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
	Minimum Credit Hours for Graduation	64

Accounting AC12

Type

Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	42-43

Office Accounting Specialist OA31

Type

Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
	Minimum Credit Hours for Graduation	14

Accounting Course Descriptions

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis, Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100

COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance. Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

Advanced Machine Tool Course Descriptions

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type

Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4

Specific Occupational-Guided Electives (3 credits)	3
Minimum Credit Hours for Graduation	51

Advanced Commercial Refrigeration AC81

Type

Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
Minimum Credit Hours for Graduation		12

Air Conditioning Electrical Technician ACK1

Type

Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
Minimum Credit Hours for Graduation		12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4

AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
Minimum Credit Hours for Graduation		20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
Minimum Credit Hours for Graduation		12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Minimum Credit Hours for Graduation		16

Air Conditioning Technology Course Descriptions

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.

Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.

Credits 4

ASTT - Aircraft Structural Technology

Aircraft Structural Technology Course Descriptions

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment. Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.

Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.

Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., Please Click Here.

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
Minimum Credit Hours for Graduation		12

Automotive Collision Repair Assistant II AZ51

Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71

Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
Minimum Credit Hours for Graduation		10

Automotive Collision Course Descriptions

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

Automotive Fundamentals AF12**Type**

Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and

advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		40

Automotive Technology AT14

Type
Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7

AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		55

Auto Electrical/Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
Minimum Credit Hours for Graduation		9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/Steering Systems	4
Minimum Credit Hours for Graduation		17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
Minimum Credit Hours for Graduation		14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7
Minimum Credit Hours for Graduation		16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
Minimum Credit Hours for Graduation		15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

* Dual Enrollment Only

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6
AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
Minimum Credit Hours for Graduation		20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
Minimum Credit Hours for Graduation		8

Automotive Technology Course Descriptions

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems

Credits 2

AUTT 1011 : Basic Auto Maintenance and Light Repair

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.

Credits 6

Corequisites

AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.

Credits 6

Prerequisites

AUTT 1010

AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.

Credits 6

Prerequisites

AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.

Credits 3

Corequisites

AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.

Credits 7

Prerequisites

AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.

Credits 4

Prerequisites

AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.

Credits 7

Prerequisites

AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1**Type**

Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
Minimum Credit Hours for Graduation		27

Avionics Maintenance Technology Course Descriptions

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.

Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.

Credits 3

Corequisites

AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.

Credits 4

Prerequisites

AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.

Credits 4

Prerequisites

AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

Credits 4

Prerequisites

AVIO 1040

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1**Type**

Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region Commercial fishermen in Georgia using a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

*** Dual Enrollment Only**

Required Courses — 12 Hours

Item #	Name	Credits
FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3
Minimum Credit Hours for Graduation		12

Basic Commercial Fisherman Course Descriptions

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.

Credits 3

Prerequisites

Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel. Topics include weather reading, radio communication, and signals and navigation of the vessel.

Credits 3

Prerequisites

Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region. Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.

Credits 3

Prerequisites

Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation. Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.

Credits 3

Prerequisites

Program Admission.

BIOL - Biology

Biology Course Descriptions

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 3

Corequisites

BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is intended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type

Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the

program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

*** Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization**

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits

ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
	Guided Electives	
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2

Type

Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
	Occupational-Guided Electives (7 hrs)	7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
Minimum Credit Hours for Graduation		46

Healthcare Billing and Coding Specialist HBC1

Type

Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		31

Healthcare Billing and Reimbursement Assistant HBA1

Type

Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		18

Healthcare Office Assistant HFA1

Type

Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
Minimum Credit Hours for Graduation		26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
Specific Occupational-Guided Electives (6 credits)		6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
Minimum Credit Hours for Graduation		64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits

MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4
	Select BUSN 2375 or BUSN 2370	3
	Select ALHS 1010, ALHS 1011, or BUSN 2310	3
	Select BUSN 2300 or ALHS 1090	2
	Electives (9 credits)	9
	Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type

Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type

Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
Specific Occupational-Guided Electives (3 credits)		3
Minimum Credit Hours for Graduation		14

Technical Specialist TC31

Type

Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
Occupationally Related Electives		

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Minimum Credit Hours for Graduation	30-39

Business Technology Course Descriptions

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

BUSN 1000 or COMP 1000 : Computers in Healthcare Or Intro to Computer Literacy

[BUSN 1000](#)

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

[COMP 1000](#)

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

BUSN 1010 : Medical Terminology, Anatomy, and Diseases for Business

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

BUSN 1015 : Introduction to Healthcare Reimbursement

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:

[ALHS 1090](#), or [BUSN 1010](#), or [BUSN 2300](#)

BUSN 1100 : Introduction to Keyboarding

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

BUSN 1190 : Digital Technologies in Business

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

BUSN 1300 : Introduction to Business

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

BUSN 1340 : Customer Service Effectiveness

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4

Prerequisites

COMP 1000

BUSN 1410 : Spreadsheet Concepts & Applications

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4

Prerequisites

COMP 1000

BUSN 1420 : Database Applications

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4

Prerequisites

COMP 1000

BUSN 1430 : Desktop Publishing & Presentation Applications

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4

Prerequisites

COMP 1000

BUSN 1440 : Document Production

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4

Prerequisites

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites

COMP 1000

BUSN 1800 : Introduction to Healthcare Accounting

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2

Prerequisites

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2

Prerequisites

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3

Prerequisites

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts

Credits 4

BUSN 2210 : Applied Office Procedures

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)

BUSN 2230 : Office Management

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3

Prerequisites

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

BUSN 2250 : Business Administrative Assistant Internship II

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

BUSN 2290 : Applied Business Technology

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.

Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.

Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.

Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

Credits 4

Prerequisites

BUSN 2320

BUSN 2340 : Healthcare Administrative Procedures

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4

Prerequisites

BUSN 1010

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

BUSN 1440

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3

Prerequisites

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3

Prerequisites

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

Prerequisites

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites

BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations. Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3

Prerequisites

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).

BUSN 2850 : Health Record Auditing

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans. Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3

Prerequisites

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)

COMP 1000 : Introduction to Computer Literacy

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

MGMT 1120 : Introduction to Business

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3

MGMT 2210 : Project Management

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3

MKTG 2500 : Exploring Social Media

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3

Corequisites

MKTG 1100

Carpentry

Carpentry Course Descriptions

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3

CARP 1015 : Structural Framing I

Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

CHEM - Chemistry

Chemistry Course Descriptions

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

College Success Course Descriptions

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit

Credits 2

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61

Type

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

Commercial Truck Driving Course Descriptions

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students* driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safety on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4

Corequisites

CTDL 1021

COMM - Communication

Communication Course Descriptions

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication.

Credits 3

COFC - Construction

Basic Electrical Technician BE11

Type

Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		13

Certified Construction Worker CCW1

Type

Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

* Select Option 1 or Option 2

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
	Minimum Credit Hours for Graduation	9

NCCER Carpentry Fundamentals, CF21

Type

Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type

Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits
ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4

NCCER Plumber's Assistant BP11

Type

Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
Minimum Credit Hours for Graduation		12

Construction Course Descriptions

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2

Prerequisites

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry

Credits 3

COFC 1020 : Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup

Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules

Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills

Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.

Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.

Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.

Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.

Credits 4

Corequisites

COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.

Credits 4

Corequisites

COFC 1080

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type

Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills, and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		44

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED Required:
 For Admission: No
 For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
Minimum Credit Hours for Graduation		36

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques, reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	3
COSM 1120	Salon Management	3

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		12

Cosmetology Course Descriptions

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites

COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites

COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites

COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites

COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites

COSM 1000

COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

COSM 1090 : Hair Services Practicum I

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000

COSM 1010

COSM 1020

COSM 1030

COSM 1040

COSM 1050

COSM 1100 : Hair Services Practicum II

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

COSM 1110 : Hair Services Practicum III

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

COSM 1115 : Hair Services Practicum IV

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2

Corequisites

COSM 1110

COSM 1120 : Salon Management

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3

Corequisites

COSM 1000

COSM 1125 : Skin & Nail Care Practicum

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2

Corequisites

COSM 1060

COSM 1070

CRJU - Criminal Justice

AS Criminal Justice, AF63

Type

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3
MATH 1131	Calculus I	4

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type

Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3

Occupational Electives — 15 Hours

Item #	Name	Credits
CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3
CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
Minimum Credit Hours for Graduation		60

Criminal Justice Technology CJT2

Type
Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3

CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
CRJU 2090 or CRJU 2100		3

Occupational Electives — 9 Hours

Item #	Name	Credits
	CRJU Occupational Electives (9 hrs)	9
	Minimum Credit Hours for Graduation	48

Crime Scene Fundamentals CZ31

Type

Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
	Minimum Credit Hours for Graduation	12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3

CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
Minimum Credit Hours for Graduation		15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 2050	Criminal Procedure	3
Minimum Credit Hours for Graduation		12

Criminal Justice Course Descriptions

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3

CRJU 1021 : Private Security

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3

CRJU 1030 : Corrections

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3

CRJU 1040 : Principles of Law Enforcement

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3

CRJU 1043 : Probation and Parole

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3

CRJU 1050 : Police Patrol Operations

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3

CRJU 1052 : Criminal Justice Admin.

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

Prep Cook PC51

Type

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

*** High School Admissions Only**

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
Minimum Credit Hours for Graduation		12

Culinary Arts Course Descriptions

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		62

Cybersecurity CY13

Type

Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
	Guided Electives (4 credits)	4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3

HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4

CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	66

Computer Support Specialist CS14

Type

Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4

CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
CIST Electives (12 credits)		12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
Minimum Credit Hours for Graduation		55-56

Cybersecurity CY12

Type

Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
	CIS Networking Electives (8 hrs)	8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type

Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

*Choose either the Microsoft or the Cisco Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
	CIST Electives (9 credits)	9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO
CIST 2452	CISCO Switching, Routing, & Wiring Essentials
CIST 2453	Enterprise Networking, Security, and Automation
Guided Elective	4

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

AWS Cloud Solutions Specialist AA91

Type

Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	16

Cisco Network Specialist CN71

Type

Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits	
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
Guided Elective	4	
Minimum Credit Hours for Graduation		16

CompTIA A+ Certified Preparation CA61

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4

CIST 1130 or CIST 1135	3-4
Minimum Credit Hours for Graduation	10

CompTIA A+ Certified Technician Preparation CA71

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
	Minimum Credit Hours for Graduation	21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and

techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Minimum Credit Hours for Graduation		26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
	CIST 2371 or CIST 2742	4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
	Guided Electives (4 credits)	4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4
	Minimum Credit Hours for Graduation	16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
	Minimum Credit Hours for Graduation	16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

CIST 1001	Computer Concepts	4
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3
CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
	Minimum Credit Hours for Graduation	11

Cyber & Related Course Descriptions

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security

Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps

Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms

Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software

Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting

Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security

Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy

Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies

Credits 4

Prerequisites

[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint

Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers

Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing

Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented

Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data

Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases

Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management

Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.

Credits 4

Prerequisites

CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

CIS 2321

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role playing exercises that students complete while developing their network upgrade proposals.

Credits 4

Prerequisites

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4

CIST 2452 : CISCO Switching, Routing, & Wiring Essentials

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4

Prerequisites

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4

Prerequisites

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security. Students will acquire the skills needed to design, implement, and support network security

Credits 4

CIST 2480 : AWS Cloud Foundations

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4

Prerequisites

CIST 1601

CIST 2742 : Beginning Python Programming

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4

CIST 2921 : It Analysis Design & Project Management

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4

CIST 2991 : Cist Internship I (Capstone)

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3

Guided Elective

Credits 4

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
Minimum Credit Hours for Graduation		47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
Minimum Credit Hours for Graduation		9

Diesel Electrical & Electronic Systems Technician DE11

Type

Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
Minimum Credit Hours for Graduation		10

Diesel Engine Service Technician DE21

Type

Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
Minimum Credit Hours for Graduation		16

Diesel Truck Maintenance Technician DTM1

Type

Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
Minimum Credit Hours for Graduation		23

Heavy Diesel Service Technician HD31

Type

Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
Minimum Credit Hours for Graduation		31

Diesel Technology Course Descriptions

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3

DIET 1010 : Diesel Electrical/Electronics

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7

Prerequisites

DIET 1000

DIET 1020 : Preventive Maintenance

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5

Prerequisites

DIET 1010

DIET 1030 : Diesel Engines

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6

Prerequisites

DIET 1010

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.

Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors.

Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.

Credits 3

DRFT - Drafting

Drafting Technology DT13 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must select and complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4

DFTG 1133	Commercial Drawing I	4
Occupationally Related Electives		

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
Occupationally Related Electives		
Minimum Credit Hours for Graduation		60

Drafting Technology DT12 (NO Longer Accepting Students)

Type
Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

* Students must complete one of the following specializations:

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31

Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

Drafting Course Descriptions

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

Credits 4

DFTG 1109 : Auxiliary Views/Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program

emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
	Minimum Credit Hours for Graduation	72

Early Childhood Care and Education ECC2

Type

Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
	EMPL 1000 or PSYC 1010	2-3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
	Minimum Credit Hours for Graduation	53

Child Development Specialist CD61

Type

Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
	ECCE 1121 or EMPL 1000	2-3
	Minimum Credit Hours for Graduation	14

Early Childhood Care and Education Basics EC31

Type

Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
	Minimum Credit Hours for Graduation	9

Early Childhood Care Education Course Descriptions

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

Credits 3

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

Credits 3

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children's creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children's creative development; facilitation of children's creative expression, media, methods and materials across the curriculum; appreciation of children's art processes and products; appreciation of children's creativity in music, movement and dance; appreciation of children's creative expression in play and creative drama; and art and music appreciation.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children's literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children's families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children's development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

Economics Course Descriptions

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective

Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

Credits 3

EDUC - Education

Education ED13**Type**

Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful

employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

* **Students** - Choose from and complete either STEM Specialization:

- Math Concentration (16 hrs)
- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education Paraprofessional EP11

Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
	Minimum Credit Hours for Graduation	14

Education Course Descriptions

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.

Credits 3

Prerequisites

ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.

Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type

Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3

ELTR 1180	Electrical Controls	4
Specific Occupational-Guided Electives (3 credits)		3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3
Specific Occupational-Guided Electives (3 credits)		3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
Specific Occupational-Guided Electives (3 credits)		3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		
Minimum Credit Hours for Graduation		54

NCCER Basic Electrical Systems Technician, BES1

Type

Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
Minimum Credit Hours for Graduation		12

Electrical Construction and Maintenance Course Descriptions

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

Electrical Systems Course Descriptions

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and smirches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type

Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type

Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2

- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Occupational Elective (3 hrs)	3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3
ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
Occupationally Related Electives		

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4
BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
Minimum Credit Hours for Graduation		54

Basic Electricity Technician BE31

Type

Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
Minimum Credit Hours for Graduation		13

Basic Electronic Assembler BE41

Type

Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
Minimum Credit Hours for Graduation		10

Digital Electronics Technician DET1

Type

Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2
Minimum Credit Hours for Graduation		13

Electrical Lineworker with Pintle Hook Restriction EL21

Type

Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
Minimum Credit Hours for Graduation		13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		10

Electronics Technology Course Descriptions

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars. Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics-Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1

ECET 1191	Computer Programming Fundamentals	3
ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

Electronics-Computer Engineering Technology Course Descriptions

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.

Credits 3

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13
- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3
ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following courses and the corresponding lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
Guided Electives - 9 Credit Hours		9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4
DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
MET Occupation Courses - minimum 9 credits		9
Guided Electives 3+		3
Minimum Credit Hours for Graduation		63

Engineering Technology Basics EBT1

Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

*** Students must choose one of the following options:**

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
Minimum Credit Hours for Graduation		20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
Minimum Credit Hours for Graduation		13

Engineering Technology Course Descriptions

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

English Course Descriptions

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3

Prerequisites

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3

Prerequisites

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3

Prerequisites

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3

Prerequisites

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3

Prerequisites

ENGL 1101

ARTS - Fine Arts

Fine Arts Course Descriptions

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3

SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6
Guided Electives 3+		3

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
Minimum Credit Hours for Graduation		62

Forestry Technology FT12

Type

Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The

technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
Minimum Credit Hours for Graduation		52

Basic Timber Harvesting BT41

Type

Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3

THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
Minimum Credit Hours for Graduation		12

Forestry Technician Assistant FTA1

Type

Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4
FORS 1160	Forest Surveying and Mapping	4
Minimum Credit Hours for Graduation		14

Land Surveying Technician LST1

Type

Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
Minimum Credit Hours for Graduation		14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
Minimum Credit Hours for Graduation		18

Forestry Course Descriptions

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

THOP 1105 : Timber Harvest Equip Oper I

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3

Prerequisites

THOP 1101

THOP 1106 : Timber Harvest Equip Oper II

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3

Prerequisites

THOP 1105

General Business

General Business GB13**Type**

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1120	Spreadsheet Applications	4
ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
	Minimum Credit Hours for Graduation	68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation

60

General Business Course Descriptions

General Studies Area III Elective : 3 or 4 hrs

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

Government Course Descriptions

POLS 1101 : American Government

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

History Course Descriptions

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980.

Credits 3

HORT - Horticulture

Horticulture EH13

Type

Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization - 8GH3
- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Specific Occupational-Guided Electives (3 credits)	3
Specific Occupational-Guided Electives (3 credits)	3
Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits
HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type
Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

* Students must select one of the following specializations:

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
Guided Electives		

Landscape Management Specialization — 15 Hours

Item #	Name	Credits
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
Guided Electives		
Minimum Credit Hours for Graduation		45

Floral Designer FD11

Type

Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
HORT Elective (4hrs)		4
Minimum Credit Hours for Graduation		15

Garden Center Technician GC31

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required

For Admissions: No

For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits

HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3
Minimum Credit Hours for Graduation		12

Landscape Specialist LS11

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
Minimum Credit Hours for Graduation		17

Nursery/Greenhouse Technician PPS1

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
Minimum Credit Hours for Graduation		17

Horticulture Course Descriptions

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.

Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.

Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective

Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

Humanities Course Descriptions

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

Electrical Control Systems EC22**Type**

Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	44

Industrial Mechanical Systems IMS2

Type

Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
Occupational Electives (11 hrs)		11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3
IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
Minimum Credit Hours for Graduation		51

Industrial Systems Technology IST4

Type

Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
MATH 1012 or MATH 1013		3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF11

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM41

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
	Minimum Credit Hours for Graduation	12

Manufacturing Maintenance Fundamentals MM11

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
Minimum Credit Hours for Graduation		12

Industrial Systems Course Descriptions

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012](#)/[MATH 1012](#)/MAT 102 or [MATH 1013](#)/MAT 1013/MAT 103.

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109	3

Area II - Social/Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOC1 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3

BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation	61

EMPL - Job Acquisition Skills

Job Acquisition Skills Course Descriptions

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2

Prerequisites

Effective Summer 2024 (202416) - Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type

Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
Occupational Guided Electives (6 hrs)		6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6
	Minimum Credit Hours for Graduation	45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
Minimum Credit Hours for Graduation		22

Metals Technician ME31

Type

Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4
WELD 1090	Gas Metal Arc Welding	4
Minimum Credit Hours for Graduation		20

Machine Tool Course Descriptions

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4

MCHT 1012 : Blueprint for Machine Tool

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3

MCHT 1013 : Machine Tool Math

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3

Prerequisites

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals.

Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4

MCHT 1020 : Heat Treatment & Surface Grinding

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders.

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

Management Course Descriptions

MGMT 1100 : Principles of Management

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

MGMT 1105 : Organizational Behavior

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

MGMT 1110 : Employment Rules & Regulations

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3

MGMT 2125 : Performance Management

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3

MGMT 2130 : Employee Training & Development

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

Credits 3

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits
MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
Minimum Credit Hours for Graduation		15

Marine Engine Technology Course Descriptions

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4

Prerequisites

MAET 1000

MAET 1150 : Marine Accessories

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4

Prerequisites

MAET 1000

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

*** Students must choose one of the following Specializations:**

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4

MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
Elective (3 credits +)		3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
Marketing Elective		3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
Minimum Credit Hours for Graduation		63

Marketing Management MM12

Type
Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2
- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC 1010	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
Guided Electives 3+		3

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3
Minimum Credit Hours for Graduation		15

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 2120, or MKTG 1130	3
	Minimum Credit Hours for Graduation	24

Marketing Course Descriptions

Guided Elective - Marketing

[MGMT 1100](#)

OR

[MKTG 1130](#)

[ACCT 2140](#)

[PARA 1150](#)

Credits 3

MGMT 2115 : Human Resource Management

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

Credits 3

MKTG 1100 : Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.

Credits 3

MKTG 1130 : Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3

MKTG 1160 : Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3

MKTG 1161 : Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

Mathematics Course Descriptions

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 & minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

Mechanical Engineering Course Descriptions

MEGT 1010 : Manufacturing Process

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

MEGT 1321 : Machining and Welding

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2

Prerequisites

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3

Prerequisites

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4

Prerequisites

MEGT 2030

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce

academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
Minimum Credit Hours for Graduation		53

Medical Assisting Course Descriptions

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant*s role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

Credits 2

MAST 1030 : Pharmacology in the Medical Office

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

Credits 4

Prerequisites

Program Admission, MATH 1012.

MAST 1060 : Medical Office Procedures

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.

Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.

Credits 4

Prerequisites

Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Further student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.

Credits 4

Prerequisites

Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2

Prerequisites

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

Naval Apprentice

Naval Electrician Apprentice EW11

Type

Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprentice TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprentice TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Naval Machine Tool Apprentice NM51

Type

Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4
Minimum Credit Hours for Graduation		28

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3
WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or IDSY 1170 or DFTG 2010	4
	Occupational Elective (3 hrs)	3
Minimum Credit Hours for Graduation		26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4
NEUT 1010	Neural Science	120 4
NEUT 1020	Pathology/Neuromuscular Therapy	3
NEUT 1030	Neuromuscular Therapy Fundamentals	3
NEUT 1050	Technique and Theory I	5
NEUT 1060	Clinic I	2
NEUT 1080	Techniques and Theory III	90 3
NEUT 1081	Techniques and Theory III	3

NEUT 1100	Adjunctive Modalities		3
NEUT 1110	Licensure Review		3
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy		2
Minimum Credit Hours for Graduation			57

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort Program - Accepting Students Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3
THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4
NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation			36

Neuromuscular Massage Therapy Course Descriptions

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90

Credits 3

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90

Credits 3

THMT 1002 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1006 : Pathology for Massage Therapist

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60

Credits 2

Prerequisites

Program Admission

THMT 1101 : Fundamentals of Massage II

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1102 : Technique and Theory II

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

NAST - Nurse Aide

Nurse Aide Course Descriptions

NAST 1100 : Nurse Aide Fundamentals

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

NAST 2100 : Nurse Aide Accelerated

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7

Corequisites

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73

Type

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1% Combined 1st Time Test Takers and Repeaters

Program Completion Rate: 100% (29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate nursing program is Initial Accreditation.

Links:

[Program Handbook](#)

[ASN Competitive Admissions Guide](#)

Competitive Admissions Program Application:
[ASN Program Application](#)

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the following (not already taken in Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7
RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
Minimum Credit Hours for Graduation		67

Nursing (ASN) Course Descriptions

RNSG 2021 : Fundamentals of Nursing

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities, growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6

Prerequisites

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3

Prerequisites

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

RNSG 2029

RNSG 2031

PARA - Paralegal Studies

Paralegal Studies PS13**Type**

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA 2210	6

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
	Minimum Credit Hours for Graduation	69

Paralegal Studies PS12

Type

Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
	Minimum Credit Hours for Graduation	38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
Minimum Credit Hours for Graduation		12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits
PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
PARA XXXX- Paralegal Electives (3 credits)		3

PARA XXXX- Paralegal Electives (3 credits)	3
Minimum Credit Hours for Graduation	30

Paralegal Studies Course Descriptions

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks. The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3

Corequisites

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3

Corequisites

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6

Prerequisites

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3

Prerequisites

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6

Prerequisites

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences.

Realistic work situations are used to provide students with in-sights into paralegal applications on the job.

Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6

Prerequisites

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMS Professions EP12**Type**

Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type
Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709

Seminole, FL 33775

Phone: (727) 210-2350

Fax: (727) 210-2354

Website Link <https://www.caahep.org/>

CoAEMSP

8301 Lakeview Parkway, Suite 111-312

Rowlett, TX 75088

Phone: (214) 703-8445

Fax: (214) 703-8992

Website Link <https://coaemsp.org/>

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits

ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2
EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic Vi	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
Minimum Credit Hours for Graduation		58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful

completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		10

Emergency Medical Responder (EMR), EB71

Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4

ALHS 1090	Medical Terminology for AHS	2
	Minimum Credit Hours for Graduation	11

Emergency Medical Technician (EMT) EMJ1

Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
	Minimum Credit Hours for Graduation	16

Pre-hospital EMS Operations PEO1

Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced

emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination. <http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST). <http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		26

Paramedicine Course Descriptions

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardio-pulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1

EMSP 1510 : Advanced Concepts for the AEMT

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3

EMSP 1520 : Advanced Patient Care for the AEMT

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3

Corequisites

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1

Corequisites

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5

Corequisites

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4

Prerequisites

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Corequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2

Prerequisites

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3

Prerequisites

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

EMSP 2510

EMSP 2520

Corequisites

EMSP 2330

EMSP 2340

EMSP 2550

EMSP 2560

EMSP 2710

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
Minimum Credit Hours for Graduation		24

Phlebotomy Course Descriptions

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3

Prerequisites

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

Physics Course Descriptions

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

Behavioral Health Technician BHT1**Type**

Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
Minimum Credit Hours for Graduation		12

Geriatric Care Assistant GC51

Type

Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals		6-7
Minimum Credit Hours for Graduation			18-19

Health Care Assistant HA21

Type

Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

* Students must complete one of the listed specializations

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits

ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2	
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
	Minimum Credit Hours for Graduation	30-31

Nurse Aide CN21

Type

Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services. Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
NAST 1100	Nurse Aide Fundamentals	6
Minimum Credit Hours for Graduation		13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/ patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
Minimum Credit Hours for Graduation		3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the

needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.

<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3
PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
Minimum Credit Hours for Graduation		49

Practical Nursing and Related Course Descriptions

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology

Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system

Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education

Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.

Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens

Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.

Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.

Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.

Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.

Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.
Credits 5

PSYC - Psychology

Psychology Course Descriptions

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.

Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.

Credits 3

RADT - Radiologic Technology

Radiologic Technology RT23

Type

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
Minimum Credit Hours for Graduation		77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
Minimum Credit Hours for Graduation		25

Radiologic Technology Course Descriptions

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4

Prerequisites

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3

Prerequisites

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3

Prerequisites

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2

Prerequisites

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4

Prerequisites

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3

Prerequisites

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2

Prerequisites

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3

Prerequisites

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures.

Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

*** Students must complete one of the Specializations below:**

- Mechanical Specialization 8M33
- Electrical Specialization 8E43

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1

BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair Systems Technology diploma prepares students for a career in the railroad/ locomotive industry as a Car Repairman, Sheet Metal Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type

Diploma

The Locomotive Electrical/Mechanical Technology program will prepare students for employment in the railroad industries. Students will gain skills to become locomotive electricians, locomotive mechanics, car repairman, and sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		58

Locomotive Car Repair Technician LCR1

Type

Technical Certificate of Credit

Diagnose, adjust, repair, or overhaul railroad cars. Students will become familiar with the rail industry; knowledge of locomotives (EMD and GE) and locomotive air brake systems; Department of Transportation and FRA rules and OSHA regulations; fundamental concepts and operations of locomotive mechanical systems. Students will be proficient with safety practices, equipment, and techniques necessary for metal heating and cutting principles; cutting torches and apparatus; metal heating techniques; metal cutting techniques; manual and automatic oxyfuel cutting techniques; oxyfuel pipe cutting; reading welding and related blueprints and sketches; shielded metal arc welding (SMAW) in flat positions; horizontal SMAW safety and health practices; selection and applications of electrodes, selection and applications for horizontal SMAW; horizontal SMAW joints; techniques required for shielded metal arc welding (SMAW) in the vertical position; selection and

applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification; overhead SMAW safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
Minimum Credit Hours for Graduation		17

Railroad Industry Course Descriptions

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.

Credits 3

Prerequisites

SCMA 1003

READ - Reading Writing

Reading Writing Course Descriptions

READ 0090 : Learning Support Reading I

No description available at this time.

Credits 3

READ 0091 : Learning Support Reading II

Credits 3

Prerequisites

minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

Religion Course Descriptions

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.

Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists. (RRTs). **The standards for the program can be viewed by clicking [here](#).**

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
<http://www.coarc.com/>

CoARC Program Number: 200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."
[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3

BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
Minimum Credit Hours for Graduation		78

Respiratory Care Course Descriptions

RESP 1110 : Pharmacology

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

[BIOL 2114](#)

[BIOL 2114L](#)

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1

Prerequisites

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1

Prerequisites

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3

Prerequisites

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3

Prerequisites

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Prerequisites

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2

Corequisites

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

Sociology Course Descriptions

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

Spanish Course Descriptions

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

Speech Course Descriptions

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOC1 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
Minimum Credit Hours for Graduation		72

Surgical Technology Course Descriptions

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

BIOL 2117

BIOL 2117L

MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2130 : Surg Tech Clinical III

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2140 : Surg Tech Clinical IV

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2240 : Seminar in Surgical Technology

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.

Credits 2

THEA - Theater Appreciation

Theater Appreciation Course Descriptions

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.

Credits 3

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type

Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
	Program Electives (6 hrs)	6
	Minimum Credit Hours for Graduation	54

Advanced Shielded Metal Arc Welder, OSM1

Type

Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4

WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		12

Basic Shielded Metal Arc Welder FS31

Type

Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
Minimum Credit Hours for Graduation		12

Gas Metal Arc Welder GM31

Type

Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		15

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	15

Welding and Joining Technology Course Descriptions

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.

Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.

Credits 4

Corequisites

WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Corequisites

WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1090

WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1050

WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

Courses

ACCT - Accounting

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100
COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100
COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100
COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100
COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance.

Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system.

Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.

Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.

Credits 4

ASTT - Aircraft Structural Technology

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment. Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.

Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.

Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks.

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques.

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2**Prerequisites**

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems

Credits 2**AUTT 1011 : Basic Auto Maintenance and Light Repair**

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.

Credits 6**Corequisites**

AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.

Credits 6**Prerequisites**

AUTT 1010

AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.

Credits 6**Prerequisites**

AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.

Credits 3**Corequisites**

AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.

Credits 7**Prerequisites**

AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.

Credits 4**Prerequisites**

AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.

Credits 7**Prerequisites**

AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.
Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.
Credits 3
Corequisites
AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.
Credits 4
Prerequisites
AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.
Credits 4
Prerequisites
AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.
Credits 4
Prerequisites
AVIO 1040

FISH - Basic Commercial Fisherman

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.
Credits 3
Prerequisites
Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel. Topics include weather reading, radio communication, and signals and navigation of the vessel.
Credits 3
Prerequisites
Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region. Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.
Credits 3
Prerequisites
Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation. Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.
Credits 3
Prerequisites
Program Admission.

BIOL - Biology

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.
Credits 3
Corequisites
BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is in-tended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BCST - Business Technology

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

**BUSN 1000 or COMP 1000 :
Computers in Healthcare Or Intro
to Computer Literacy**

[BUSN 1000](#)

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

[COMP 1000](#)

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3

**BUSN 1010 : Medical Terminology,
Anatomy, and Diseases for
Business**

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

**BUSN 1015 : Introduction to
Healthcare Reimbursement**

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:
[ALHS 1090](#), or [BUSN 1010](#), or
[BUSN 2300](#)

**BUSN 1100 : Introduction to
Keyboarding**

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

**BUSN 1190 : Digital Technologies
in Business**

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

**BUSN 1300 : Introduction to
Business**

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

**BUSN 1340 : Customer Service
Effectiveness**

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4**Prerequisites**
COMP 1000**BUSN 1410 : Spreadsheet Concepts & Applications**

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4**Prerequisites**
COMP 1000**BUSN 1420 : Database Applications**

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4**Prerequisites**
COMP 1000**BUSN 1430 : Desktop Publishing & Presentation Applications**

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4**Prerequisites**
COMP 1000**BUSN 1440 : Document Production**

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4**Prerequisites**

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites
COMP 1000**BUSN 1800 : Introduction to Healthcare Accounting**

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2

Prerequisites

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2

Prerequisites

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3

Prerequisites

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts

Credits 4

BUSN 2210 : Applied Office Procedures

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)

BUSN 2230 : Office Management

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3

Prerequisites

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4

BUSN 2250 : Business Administrative Assistant Internship II

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6

BUSN 2290 : Applied Business Technology

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3

Prerequisites

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.
Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.
Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.
Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

Credits 4**Prerequisites**

[BUSN 2320](#)

BUSN 2340 : Healthcare Administrative Procedures

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4**Prerequisites**

[BUSN 1010](#)

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

[BUSN 1440](#)

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3**Prerequisites**

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3**Prerequisites**

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4**Prerequisites**

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6**Prerequisites**

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites
BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#)
and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and
[BUSN 2310](#) or [ALHS 1011](#) and
[MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations. Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3**Prerequisites**

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).**BUSN 2850 : Health Record Auditing**

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans. Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3**Prerequisites**

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)**COMP 1000 : Introduction to Computer Literacy**

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3**MGMT 1120 : Introduction to Business**

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3**MGMT 2210 : Project Management**

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3**MKTG 2500 : Exploring Social Media**

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3**Corequisites**

MKTG 1100

Carpentry

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3**CARP 1015 : Structural Framing I**

Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3**Prerequisites**

CARP 1000

COFC 1080

CHEM - Chemistry

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#)

Corequisites

CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1

Prerequisites

CHEM 1151

CHEM 1151L

Corequisites

CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1

Prerequisites

[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).

Corequisites

CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/ Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills

COMP 1000

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit
Credits 2

CTDL - Commercial Truck Driving

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students* driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safely on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4**Corequisites**

CTDL 1021

COMM - Communication

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication.

Credits 3

COFC - Construction

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3**Prerequisites**

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2**Prerequisites**

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry

Credits 3**COFC 1020 : Professional Tool Use and Safety**

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup

Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules
Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills
Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.
Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.
Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.
Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.
Credits 4
Corequisites
COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.
Credits 4
Corequisites
COFC 1080

COSM - Cosmetology

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.
Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.
Credits 3
Corequisites
COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites

COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites

COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites

COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites

COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites

COSM 1000

COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

**COSM 1090 : Hair Services
Practicum I**

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure.

Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/ pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000
COSM 1010
COSM 1020
COSM 1030
COSM 1040
COSM 1050

**COSM 1100 : Hair Services
Practicum II**

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/ pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

**COSM 1110 : Hair Services
Practicum III**

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

**COSM 1115 : Hair Services
Practicum IV**

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/ decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2

Corequisites

COSM 1110

COSM 1120 : Salon Management

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3

Corequisites

COSM 1000

COSM 1125 : Skin & Nail Care Practicum

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2**Corequisites**

COSM 1060

COSM 1070

CRJU - Criminal Justice

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3**CRJU 1021 : Private Security**

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3**CRJU 1030 : Corrections**

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3**CRJU 1040 : Principles of Law Enforcement**

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3**CRJU 1043 : Probation and Parole**

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3**CRJU 1050 : Police Patrol Operations**

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3**CRJU 1052 : Criminal Justice Admin.**

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3**Prerequisites**

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI) This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security
Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps
Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms
Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software
Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting
Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security
Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy
Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies
Credits 4
Prerequisites
[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint
Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers
Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing
Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented
Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data
Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases
Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management
Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.
Credits 4
Prerequisites
CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

[CIS 2321](#)

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role laying exercises that students complete while developing their network upgrade proposals.

Credits 4**Prerequisites**

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4**CIST 2452 : CISCO Switching, Routing, & Wiring Essentials**

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4**Prerequisites**

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4**Prerequisites**

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security.

Students will acquire the skills needed to design, implement, and support network security

Credits 4**CIST 2480 : AWS Cloud Foundations**

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4**Prerequisites****CIST 1601****CIST 2742 : Beginning Python Programming**

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4**CIST 2921 : It Analysis Design & Project Management**

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4**CIST 2991 : Cist Internship I (Capstone)**

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3**Guided Elective****Credits 4**

DIET - Diesel Technology

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3**DIET 1010 : Diesel Electrical/ Electronics**

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7**Prerequisites****DIET 1000****DIET 1020 : Preventive Maintenance**

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5**Prerequisites****DIET 1010****DIET 1030 : Diesel Engines**

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6**Prerequisites****DIET 1010**

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.
Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors. Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.
Credits 3

DRFT - Drafting

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.
Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.
Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.
Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.
Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.
Credits 4

DFTG 1109 : Auxiliary Views/Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.
Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.
Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.
Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.
Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.
Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

Credits 3

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

Credits 3

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children*s creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children*s creative development; facilitation of children*s creative expression, media, methods and materials across the curriculum; appreciation of children*s art processes and products; appreciation of children*s creativity in music, movement and dance; appreciation of children*s creative expression in play and creative drama; and art and music appreciation.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children*s literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children*s families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children*s development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6

Prerequisites

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective
Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.
Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.
Credits 3

EDUC - Education

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.
Credits 3
Prerequisites
ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.
Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams.

Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and switches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars. Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics- Computer Engineering Technology

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.

Credits 3

ECET - Engineering Technology

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3

Prerequisites

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3

Prerequisites

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3

Prerequisites

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3

Prerequisites

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3

Prerequisites

ENGL 1101

ARTS - Fine Arts

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3

Prerequisites

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

**THOP 1105 : Timber Harvest
Equip Oper I**

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3
Prerequisites
THOP 1101

**THOP 1106 : Timber Harvest
Equip Oper II**

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3
Prerequisites
THOP 1105

General Business

**General Studies Area III Elective :
3 or 4 hrs**

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

**POLS 1101 : American
Government**

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3
Prerequisites
minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980.
Credits 3

HORT - Horticulture

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.
Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.
Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.
Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.
Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.
Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.
Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.
Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.
Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective
Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012/MATH 1012](#)/MAT 102 or [MATH 1013/MAT 1013/MAT 103](#).

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/ Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

EMPL - Job Acquisition Skills

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2

Prerequisites

Effective Summer 2024 (202416)

- Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4

MCHT 1012 : Blueprint for Machine Tool

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3

MCHT 1013 : Machine Tool Math

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3

Prerequisites

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4

MCHT 1020 : Heat Treatment & Surface Grinding

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders. Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

MGMT 1100 : Principles of Management

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

MGMT 1105 : Organizational Behavior

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

MGMT 1110 : Employment Rules & Regulations

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3

MGMT 2125 : Performance Management

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3

MGMT 2130 : Employee Training & Development

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

Credits 3

MAET - Marine Engine Technology

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4**Prerequisites****MAET 1000****MAET 1150 : Marine Accessories**

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4**Prerequisites****MAET 1000**

MKTG - Marketing

Guided Elective - Marketing[MGMT 1100](#)**OR**[MKTG 1130](#)[ACCT 2140](#)[PARA 1150](#)**Credits 3****MGMT 2115 : Human Resource Management**

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

Credits 3**MKTG 1100 : Principles of Marketing**

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.

Credits 3**MKTG 1130 : Business Regulations and Compliance**

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3**MKTG 1160 : Professional Selling**

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3**MKTG 1161 : Service Industry Business Environment**

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER

arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 & minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

MEGT 1010 : Manufacturing Process

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

MEGT 1321 : Machining and Welding

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2**Prerequisites**

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3**Prerequisites**

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4**Prerequisites**

MEGT 2030

MAST - Medical Assisting

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant's role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

Credits 2**MAST 1030 : Pharmacology in the Medical Office**

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

Credits 4**Prerequisites**

Program Admission, MATH 1012.

MAST 1060 : Medical Office**Procedures**

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.

Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.

Credits 4

Prerequisites

Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Further student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.

Credits 4

Prerequisites

Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2

Prerequisites

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3

Prerequisites

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4

Prerequisites

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

NEUT - Neuromuscular Massage Therapy

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function; communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/ Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2

Prerequisites

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90

Credits 3

Prerequisites

NEUT 1001
NEUT 1020
NEUT 1030
NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3

Prerequisites

NEUT 1005
NEUT 1010
NEUT 1060
NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3

Prerequisites

NEUT 1005
NEUT 1010
NEUT 1060
NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3

Prerequisites

NEUT 1005
NEUT 1010
NEUT 1060
NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005
NEUT 1010
NEUT 1060
NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2**Prerequisites**

NEUT 1005
NEUT 1010
NEUT 1060
NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90**Credits 3****THMT 1002 : Technique and Theory I**

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session.

Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.
Clock Hours 120

Credits 4**Prerequisites**

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90**Credits 3****Prerequisites**

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90**Credits 3****Prerequisites**

Program Admission

THMT 1006 : Pathology for Massage Therapist

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60**Credits 2****Prerequisites**

Program Admission

THMT 1101 : Fundamentals of Massage II

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120**Credits 4****Prerequisites**

Program Admission

THMT 1102 : Technique and Theory II

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120**Credits 4****Prerequisites**

Program Admission

NAST - Nurse Aide

NAST 1100 : Nurse Aide Fundamentals

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6**NAST 2100 : Nurse Aide Accelerated**

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7**Corequisites**

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3**RNSG - Nursing (ASN)****RNSG 2021 : Fundamentals of Nursing**

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/ psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities,

growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6

Prerequisites

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3

Prerequisites

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

RNSG 2029

RNSG 2031

PARA - Paralegal Studies

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks.

The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3

Corequisites

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3

Corequisites

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6

Prerequisites

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3

Prerequisites

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6

Prerequisites

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Realistic work situations are used to provide students with in-sights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6

Prerequisites

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility.

Major areas of instruction include Introductory Medical

Terminology and Anatomy &

Physiology; Responder Safety;

Incident Command; Bloodborne

Pathogen Training; Basic Physical

Assessment; and Treatment of

Trauma and Medical

Emergencies; Cardio-pulmonary

Resuscitation and the use of

Automatic External Defibrillators.

The course is a blend of lecture, hands on lab/learning, and

practical scenario based learning/

testing. The course will include

Healthcare Provider CPR/AED

Certification from a Nationally

Recognized Body (American

Heart Association, Red Cross,

etc). If this course is also

approved by the Georgia State

Office of Emergency Medical

Services and Trauma (SOEMST),

successful completion will allow

the student to be eligible to take

the National Registry of

Emergency Medical Technicians

(NREMT) Emergency Medical

Responder (EMR) certification.

Topics include: Preparatory;

Anatomy and Physiology; Medical

Terminology; Pathophysiology;

Life Span Development; Public

Health; Pharmacology; Airway;

Management; Respiration and

Artificial Ventilation; Assessment;

Medicine; Shock and

Resuscitation; Trauma; Special

Patient Populations; EMS

Operations; and Integration of

Patient Assessment and

Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3**Prerequisites**

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1**EMSP 1510 : Advanced Concepts for the AEMT**

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3**EMSP 1520 : Advanced Patient Care for the AEMT**

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/ Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3**Corequisites**

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1**Corequisites**

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/ Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5**Corequisites**

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4**Prerequisites**

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4**Prerequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Corequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Corequisites**

EMSP 2110
EMSP 2120
EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2510
EMSP 2520

Corequisites

EMSP 2140
EMSP 2310
EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2140
EMSP 2310
EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560
EMSP 2710

PHLT - Phlebotomy

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3**Prerequisites**

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology
Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system
Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens
Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education
Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.
Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens
Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.
Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.
Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.
Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.
Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/ 60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After, this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client, care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.

Credits 5

PSYC - Psychology

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.

Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.

Credits 3

RADT - Radiologic Technology

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4**Prerequisites**

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3**Prerequisites**

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3**Prerequisites**

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2**Prerequisites**

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4**Prerequisites**

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3**Prerequisites**

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2**Prerequisites**

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3**Prerequisites**

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.

Credits 3

Prerequisites

SCMA 1003

READ - Reading Writing

READ 0090 : Learning Support Reading I

No description available at this time.

Credits 3

READ 0091 : Learning Support Reading II

Credits 3

Prerequisites

minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.

Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

RESP 1110 : Pharmacology

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following

Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following

Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1**Prerequisites**

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1**Prerequisites**

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3**Prerequisites**

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3**Prerequisites**

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2**Prerequisites**

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2**Corequisites**

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114
BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114
BIOL 2114L
BIOL 2117
BIOL 2117L
MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114
BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3**SURG 2130 : Surg Tech Clinical III**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3**SURG 2140 : Surg Tech Clinical IV**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2240 : Seminar in Surgical Technology

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.
Credits 2

THEA - Theater Appreciation

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.
Credits 3

WELD - Welding and Joining Technology

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.
Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.
Credits 4
Corequisites
WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.
Credits 4
Prerequisites
WELD 1000
WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.
Credits 4
Prerequisites
WELD 1000
WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.
Credits 4
Prerequisites
WELD 1000
WELD 1010
Corequisites
WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000
WELD 1010
WELD 1060
WELD 1090
WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000
WELD 1010
WELD 1060
WELD 1050
WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000
WELD 1010

ACCT - Accounting

Accounting AC13**Type**

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/ Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3

HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits

ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
	Minimum Credit Hours for Graduation	64

Accounting AC12

Type
Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4

ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	42-43

Office Accounting Specialist OA31

Type
Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
	Minimum Credit Hours for Graduation	14

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type
Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4

AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	51

Advanced Commercial Refrigeration AC81

Type
Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
	Minimum Credit Hours for Graduation	12

Air Conditioning Electrical Technician ACK1

Type
Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
	Minimum Credit Hours for Graduation	12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
Minimum Credit Hours for Graduation		20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
Minimum Credit Hours for Graduation		12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
Minimum Credit Hours for Graduation		16

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51 Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., Please Click Here.

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4

Minimum Credit Hours for Graduation

Automotive Collision Repair Assistant II AZ51 Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71 Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing

specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
	Minimum Credit Hours for Graduation	10

AUTT - Automotive Technology

Automotive Fundamentals AF12

Type
Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
	Minimum Credit Hours for Graduation	40

Automotive Technology AT14

Type
Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and

professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4

AUTT 2030	Automatic Transmissions & Transaxles	5
	Minimum Credit Hours for Graduation	55

Auto Electrical/ Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
	Minimum Credit Hours for Graduation	9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with

skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/ Steering Systems	4
	Minimum Credit Hours for Graduation	17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
	Minimum Credit Hours for Graduation	14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7
	Minimum Credit Hours for Graduation	16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
Minimum Credit Hours for Graduation		15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

* Dual Enrollment Only

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6
AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
Minimum Credit Hours for Graduation		20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
Minimum Credit Hours for Graduation		18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2

AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
	Minimum Credit Hours for Graduation	8

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1

Type
Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3

AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
	Minimum Credit Hours for Graduation	27

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1

Type
Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region. Commercial fishermen in Georgia using a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

* Dual Enrollment Only

Required Courses — 12 Hours

Item #	Name	Credits

FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3
	Minimum Credit Hours for Graduation	12

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type
Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office.

Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

* Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3
BUSN 2850	Health Record Auditing	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
	Guided Electives	
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2 Type Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business

Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3

COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
	Occupational-Guided Electives (7 hrs)	7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
	Minimum Credit Hours for Graduation	46

Healthcare Billing and Coding Specialist HBC1

Type

Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	31

Healthcare Billing and Reimbursement Assistant HBA1

Type

Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	18

Healthcare Office Assistant HFA1

Type

Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits

ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3

MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
	Specific Occupational-Guided Electives (6 credits)	6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
	Minimum Credit Hours for Graduation	64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare

graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits
MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4
	Select BUSN 2375 or BUSN 2370	3
	Select ALHS 1010, ALHS 1011, or BUSN 2310	3
	Select BUSN 2300 or ALHS 1090	2
	Electives (9 credits)	9
	Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type
Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3

BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type
Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4

BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type
Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	14

Technical Specialist TC31

Type
Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
	Occupationally Related Electives	

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3

MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3

MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

General Education Courses

Minimum Credit Hours for Graduation	30-39

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61

Type

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

COFC - Construction

Basic Electrical Technician BE11

Type
Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		13

Certified Construction Worker CCW1

Type
Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

* Select Option 1 or Option 2

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
Minimum Credit Hours for Graduation		9

NCCER Carpentry Fundamentals, CF21

Type
Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates

receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type

Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits

ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4
	Minimum Credit Hours for Graduation	12

NCCER Plumber's Assistant BP11

Type

Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
	Minimum Credit Hours for Graduation	12

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type

Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/ intertwinning hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training

requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3

COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills, and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		44

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED
Required:

For Admission: No

For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3

COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
Minimum Credit Hours for Graduation		36

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques, reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	3
COSM 1120	Salon Management	3

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
	Elective (3 credits +)	3
Minimum Credit Hours for Graduation		12

CRJU - Criminal Justice

AS Criminal Justice, AF63

Type

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of

science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOCL 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3
MATH 1131	Calculus I	4

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3

CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type

Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/ Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3

SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
	CRJU 2090 or CRJU 2100	3

Occupational Electives — 15 Hours

Item #	Name	Credits

CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3
CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
	Minimum Credit Hours for Graduation	60

Criminal Justice Technology CJT2

Type
Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice

Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3

CRJU 2070	Juvenile Justice	3
	CRJU 2090 or CRJU 2100	3

Occupational Electives — 9 Hours

Item #	Name	Credits
	CRJU Occupational Electives (9 hrs)	
	Minimum Credit Hours for Graduation	48

Crime Scene Fundamentals CZ31

Type

Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3

CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
	Minimum Credit Hours for Graduation	12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3

CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
	Minimum Credit Hours for Graduation	15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3

CRJU 2050	Criminal Procedure	3
	Minimum Credit Hours for Graduation	12

CUUL - Culinary Arts

Prep Cook PC51

Type

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

* High School Admissions Only

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
	Minimum Credit Hours for Graduation	12

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence

of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3

ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3

MUSC	Music	3
1101	Appreciation	
THEA	Theater	3
1101	Appreciation	
RELG	World Religion	3
1101		
SPAN	Introduction to	3
1101	Spanish	

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
	Minimum Credit Hours for Graduation	62

Cybersecurity CY13

Type
Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/ Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3

PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/ Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from

the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Guided Electives (4 credits)		4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Minimum Credit Hours for Graduation 60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy. The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4

Minimum Credit Hours for Graduation 66

Computer Support Specialist CS14

Type
Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing.

Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy. The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
	Minimum Credit Hours for Graduation	55-66

Cybersecurity CY12

Type
Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer

Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
	CIS Networking Electives (8 hrs)	8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type
Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy. The CIS program is a member of the Microsoft IT Academy.

***Choose either the Microsoft or the Cisco Specialization**

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST Electives (9 credits)		9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
CIST 2414 or CIST 2420		4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials4
CIST 2453	Enterprise Networking, Security, and Automation4
Guided Elective	4

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4
Minimum Credit Hours for Graduation		54-55

AWS Cloud Solutions Specialist AA91

Type
Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
Guided Electives (4 4 credits)		
Minimum Credit Hours for Graduation		16

Cisco Network Specialist CN71

Type

Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO 4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials 4
CIST 2453	Enterprise Networking, Security, and Automation 4

Guided 4 Elective

Minimum Credit Hours for Graduation	16

CompTIA A+ Certified Preparation CA61

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4
CIST 1130 or CIST 1135		3-4
Minimum Credit Hours for Graduation		10

CompTIA A+ Certified Technician Preparation CA71

Type

Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual

possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1130 or CIST 1135		3-4
Guided Electives (4 4 credits)		
Minimum Credit Hours for Graduation		18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3

CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
Minimum Credit Hours for Graduation		21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
Minimum Credit Hours for Graduation		26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
CIST 2371 or CIST 2742		4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
Guided Electives (4 credits)		4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
Minimum Credit Hours for Graduation		26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4
Minimum Credit Hours for Graduation		16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade

his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
Minimum Credit Hours for Graduation		16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3

CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
	Minimum Credit Hours for Graduation	11

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3

EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
	Minimum Credit Hours for Graduation	47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain

entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
	Minimum Credit Hours for Graduation	9

Diesel Electrical & Electronic Systems Technician DE11

Type
Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3

DIET 1010	Diesel Electrical/ Electronics	7
	Minimum Credit Hours for Graduation	10

Diesel Engine Service Technician DE21

Type
Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1030	Diesel Engines	6
	Minimum Credit Hours for Graduation	16

Diesel Truck Maintenance Technician DTM1

Type
Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered

include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
	Minimum Credit Hours for Graduation	23

Heavy Diesel Service Technician HD31

Type
Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
	Minimum Credit Hours for Graduation	31

DRFT - Drafting

Drafting Technology DT13 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

*** Students must select and complete one of the following specializations:**

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4

Occupationally Related Electives

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	60

Drafting Technology DT12 (NO Longer Accepting Students)

Type
Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning

opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

* Students must complete one of the following specializations:

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31 Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits

DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3

SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits

ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
	Minimum Credit Hours for Graduation	72

Early Childhood Care and Education ECC2

Type

Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of

childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
	EMPL 1000 or PSYC2-3 1010	

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3

ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
	Minimum Credit Hours for Graduation	53

Child Development Specialist CD61

Type
Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more

content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
	ECCE 1121 or EMPL 2-3 1000	
	Minimum Credit Hours for Graduation	14

Early Childhood Care and Education Basics EC31

Type
Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic

knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
	Minimum Credit Hours for Graduation	9

EDUC - Education

Education ED13

Type
Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

* **Students** - Choose from and complete either STEM Specialization:

- Math Concentration (16 hrs)

- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3

ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3

BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education

Paraprofessional EP1 I Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits

EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
	Minimum Credit Hours for Graduation	14

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type

Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
	PHYS 1111 (+ lab) or 4 IDSY 1170 or DFTG 2010	
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3
ELTR 1180	Electrical Controls	4
	Specific Occupational-Guided Electives (3 credits)	3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3

Specific Occupational- Guided Electives (3 credits)	3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
	Specific Occupational-Guided Electives (3 credits)	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	54

NCCER Basic Electrical Systems Technician, BES1 Type

Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
	Minimum Credit Hours for Graduation	12

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type
Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of

electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type
Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2
- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Occupational Elective (3 hrs)	3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3

ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors & Robotics	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4
BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
	Minimum Credit Hours for Graduation	54

Basic Electricity Technician BE31

Type
Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
	Minimum Credit Hours for Graduation	13

Basic Electronic Assembler BE41

Type
Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
	Minimum Credit Hours for Graduation	10

Digital Electronics Technician DET1

Type
Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2
	Minimum Credit Hours for Graduation	13

Electrical Lineworker with Pintle Hook Restriction EL21

Type
Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization

principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
	Minimum Credit Hours for Graduation	13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating

current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
	Minimum Credit Hours for Graduation	10

UAST - Electronics-Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1
ECET 1191	Computer Programming Fundamentals	3

ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13
- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3
ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following
courses and the corresponding
lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
Guided Electives - 9 Credit Hours		9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4
DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3

MET Occupation Courses - minimum 9 credits

Guided Electives 3+	3
Minimum Credit Hours for Graduation	63

Engineering Technology Basics EBT1 Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

* Students must choose one of the following options:

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
	Minimum Credit Hours for Graduation	20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
	Minimum Credit Hours for Graduation	13

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3

CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

General Education Courses

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6
	Guided Electives 3+	3

Forest Internship/ Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
	Minimum Credit Hours for Graduation	62

Forestry Technology FT12

Type
Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6

Forest Internship/ Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
	Minimum Credit Hours for Graduation	52

Basic Timber Harvesting BT41

Type
Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and

timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
	Minimum Credit Hours for Graduation	12

Forestry Technician Assistant FTA1

Type
Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4

FORS 1160	Forest Surveying and Mapping	4
	Minimum Credit Hours for Graduation	14

Land Surveying Technician LST1

Type

Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
	Minimum Credit Hours for Graduation	14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry

standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
	Minimum Credit Hours for Graduation	18

General Business

General Business GB13

Type

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at

senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3

BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/ Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4

ACCT 1120	Spreadsheet Applications	4
ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
	Minimum Credit Hours for Graduation	68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/ Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/ Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/ Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation	60

HORT - Horticulture

Horticulture EH13

Type
Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

* Students must select one of the following specializations:

- General Horticulture Specialization - 8GH3
- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4

HORT 2249	Flower Shop Management	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits
HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type
Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the

program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
Guided Electives		

Landscape Management Specialization — 15 Hours

Item #	Name	Credits
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
Guided Electives		
	Minimum Credit Hours for Graduation	45

Floral Designer FD11 Type

Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition

to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	15

Garden Center Technician GC31

Type

Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required
For Admissions: No
For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3

Minimum Credit Hours for Graduation	12

Landscape Specialist LS11

Type
Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
	Minimum Credit Hours for Graduation	17

Nursery/Greenhouse Technician PPS1

Type
Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits

HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
	Minimum Credit Hours for Graduation	17

IDSY - Industrial Systems

Electrical Control Systems EC22

Type
Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2

ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4

Specific Occupational-Guided Electives (6 credits)

6

Minimum Credit Hours for Graduation

44

Industrial Mechanical Systems IMS2

Type
Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
	Occupational Electives (11 hrs)	11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3
IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
	Minimum Credit Hours for Graduation	51

Industrial Systems Technology IST4

Type
Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF11

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4

IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM41

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
	Minimum Credit Hours for Graduation	12

Manufacturing Maintenance Fundamentals MM11

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
	Minimum Credit Hours for Graduation	25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
	Minimum Credit Hours for Graduation	12

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically

selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109	3

Area II - Social/Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3

PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation	61

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type
Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a

combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
	Occupational Guided Electives (6 hrs)	6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6
	Minimum Credit Hours for Graduation	45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4

AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
	Minimum Credit Hours for Graduation	22

Metals Technician ME31

Type

Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4

WELD 1090	Gas Metal Arc Welding	4
	Minimum Credit Hours for Graduation	20

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits
MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
	Minimum Credit Hours for Graduation	15

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

*** Students must choose one of the following Specializations:**

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MKTG 1100	Principles of Marketing	3

MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Elective (3 credits +)	3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/ Practicum	3
MKTG 2300	Marketing Management	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3

MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	63

Marketing Management MM12

Type
Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2
- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	

MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Guided Electives 3+	3

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3
MKTG 2030	Digital Publishing and Design	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits

MKTG 2290	Marketing Internship/ Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3

MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3

MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3
	Minimum Credit Hours for Graduation	15

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3

Minimum Credit 15
Hours for
Graduation

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 32120, or MKTG 1130	
	Minimum Credit Hours for Graduation	24

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American

Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3

MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
	Minimum Credit Hours for Graduation	53

Naval Apprentice

Naval Electrician Apprentice EW11

Type
Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprentice TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprentice TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3
	Minimum Credit Hours for Graduation	18

Naval Machine Tool Apprentice NM51

Type
Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3
WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or 4 IDSY 1170 or DFTG 2010	
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular

Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4

NEUT 1010	Neural Science	120	4
NEUT 1020	Pathology/Neuromuscular Therapy	3	
NEUT 1030	Neuromuscular Therapy Fundamentals	3	
NEUT 1050	Technique and Theory I	5	
NEUT 1060	Clinic I	2	
NEUT 1080	Techniques and Theory III	90	3
NEUT 1081	Techniques and Theory III	3	
NEUT 1100	Adjunctive Modalities	3	
NEUT 1110	Licensure Review	3	
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy	2	
Minimum Credit Hours for Graduation		57	

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis,

neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort
Program - Accepting Students
Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3

THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4
NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation		36	

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73

Type

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1%

Combined 1st Time Test Takers
and Repeaters

Program Completion Rate: 100%
(29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for
Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite
1400 Atlanta, GA 30326
(404) 975-5000

The most recent accreditation
decision made by the ACEN
Board of Commissioners for the
Associate nursing program is
Initial Accreditation.

Links:

[Program Handbook](#)

[ASN Competitive Admissions
Guide](#)

Competitive Admissions Program
Application:
[ASN Program Application](#)

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following
Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the
following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the
following (not already taken in
Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7

RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
Minimum Credit Hours for Graduation		67

PARA - Paralegal Studies

Paralegal Studies PS13

Type

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3

HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA6 2210	

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/ Debtor-Creditor Relations	3
	Minimum Credit Hours for Graduation	69

Paralegal Studies PS12

Type
Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/ Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
	Minimum Credit Hours for Graduation	38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a

variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
	Minimum Credit Hours for Graduation	12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and

federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits
PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	PARA XXXX- Paralegal Electives (3 credits)	3
	Minimum Credit Hours for Graduation	30

EMSP - Paramedicine

EMS Professions EP12

Type

Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the

paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency

Medical Services and Trauma(SOEMST).
<http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5

ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type
Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The

Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs

(www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
[Website Link](http://www.caahep.org/)
<https://www.caahep.org/>

CoAEMSP

8301 Lakeview Parkway, Suite 111-312
Rowlett, TX 75088
Phone: (214) 703-8445
Fax: (214) 703-8992
[Website Link](http://www.coaemsp.org/)
<https://coaemsp.org/>

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4

EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2
EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic VI	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
Minimum Credit Hours for Graduation		58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited

advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful

completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		10

Emergency Medical Responder (EMR), EB71 Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and

during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4
ALHS 1090	Medical Terminology for AHS	2

Minimum Credit Hours for Graduation 11

Emergency Medical Technician (EMT) EMJ1

Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
Minimum Credit Hours for Graduation		16

Pre-hospital EMS Operations PEO1

Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.
<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST).
<http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination.
<http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST).
<http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		26

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics

covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
	Minimum Credit Hours for Graduation	24

Practical Nursing and Related

Behavioral Health Technician BHT1

Type
Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health

technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
	Minimum Credit Hours for Graduation	12

Geriatric Care Assistant GC51

Type
Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits

ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	
	Minimum Credit Hours for Graduation	18-19	

Health Care Assistant HA21

Type
Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

*** Students must complete one of the listed specializations**

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2	
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
	Minimum Credit Hours for Graduation	30-31

Nurse Aide CN21

Type
Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical

experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services. Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2

NAST 1100	Nurse Aide Fundamentals	6
	Minimum Credit Hours for Graduation	13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
	Minimum Credit Hours for Graduation	3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.

<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions

Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3
PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
	Minimum Credit Hours for Graduation	49

RADT - Radiologic Technology

Radiologic Technology RT23

Type

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on
Education in Radiologic
Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

[MATH 1103](#) Quantitative Skills & Reasoning 3

Area IV - Humanities/ Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
	Minimum Credit Hours for Graduation	77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients

and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
	Minimum Credit Hours for Graduation	25

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

*** Students must complete one of the Specializations below:**

- Mechanical Specialization 8M33

- Electrical Specialization
8E43

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3

BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3

ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair Systems Technology diploma prepares students for a career in the railroad/locomotive industry as a Car Repairman, Sheet Metal Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3

EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2
Minimum Credit Hours for Graduation		48

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Electrical/Mechanical Technology program will prepare students for employment in the railroad industries. Students will gain skills to become locomotive electricians, locomotive mechanics, car repairman, and sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4

WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
Minimum Credit Hours for Graduation		58

Locomotive Car Repair Technician LCR1

Type

Technical Certificate of Credit

Diagnose, adjust, repair, or overhaul railroad cars. Students will become familiar with the rail industry; knowledge of locomotives (EMD and GE) and locomotive air brake systems; Department of Transportation and FRA rules and OSHA regulations; fundamental concepts and operations of locomotive mechanical systems. Students will be proficient with safety practices, equipment, and techniques necessary for metal heating and cutting principles; cutting torches and apparatus; metal heating techniques; metal cutting techniques; manual and automatic oxyfuel cutting techniques; oxyfuel pipe cutting; reading welding and related blueprints and sketches; shielded metal arc welding (SMAW) in flat positions; horizontal SMAW safety and health practices; selection and applications of electrodes, selection and applications for horizontal SMAW; horizontal SMAW joints; techniques required for shielded metal arc welding (SMAW) in the vertical position; selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification; overhead SMAW

safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
Minimum Credit Hours for Graduation		18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
	Minimum Credit Hours for Graduation	18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2

ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
	Minimum Credit Hours for Graduation	17

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior)

learning domains of respiratory care practice as performed by registered respiratory therapists. (RRTs). The standards for the program can be viewed by clicking [here](#).

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
[http://www.coarc.com/](http://www.coarc.com)

CoARC Program Number:
200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."

[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
	Minimum Credit Hours for Graduation	78

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
	Minimum Credit Hours for Graduation	72

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type
Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and

practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
	Program Electives (6 hrs)	6

Minimum Credit 54
Hours for
Graduation

Advanced Shielded Metal Arc Welder, OSM1

Type

Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Basic Shielded Metal Arc Welder FS31

Type

Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
	Minimum Credit Hours for Graduation	12

Gas Metal Arc Welder GM31

Type

Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3

Minimum Credit 15
Hours for
Graduation

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	15

ACCT - Accounting

Accounting AC13

Type

Associate of Applied Science, AAS

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning

opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

Area I - Language Arts/ Communications — 3 Hours

Successful completion of ENGL 1101 is required.

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

One additional course from Area I, II, III, or IV

For a complete listing of General Education courses and electives select the following link:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
	Accounting Electives (9 credits)	9
	Electives (9 credits)	9

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1120	Spreadsheet Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
	Minimum Credit Hours for Graduation	64

Accounting AC12

Type
Diploma

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	
	MATH 1011 or MATH 1012	3

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3

Accounting Electives (3 credits)	3
Specific Occupational-Guided Electives (3 credits)	3
Minimum Credit Hours for Graduation	42-43

Office Accounting Specialist OA31

Type
Technical Certificate of Credit

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include principles of accounting, computerized accounting and basic computer skills.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
	Minimum Credit Hours for Graduation	14

Accounting Course Descriptions

ACCT 1100 : Financial Accounting I

Introduces the basic financial accounting concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle for a personal service business, the accounting cycle for a merchandising business, inventory, cash control and receivables. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

Program Admission or Advisor Approval.

ACCT 1105 : Financial Accounting II

Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis. Laboratory work demonstrates theory presented in class.

Credits 4

Prerequisites

ACCT 1100
COMP 1000

ACCT 1115 : Computerized Accounting

Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

Credits 3

Prerequisites

ACCT 1100
COMP 1000

ACCT 1120 : Spreadsheet Applications

This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

Credits 4

Prerequisites

ACCT 1100
COMP 1000

ACCT 1125 : Individual Tax Accounting

Provides instruction for the preparation of individual federal income tax returns. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

Credits 3

Prerequisites

Program Admission

ACCT 1130 : Payroll Accounting

Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, and analyzing and journalizing payroll transactions.

Credits 3

Prerequisites

ACCT 1100
COMP 1000

ACCT 2000 : Managerial Accounting

Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

Credits 3

Prerequisites

COMP 1000

Corequisites

ACCT 1105

ACCT 2100 : Accounting Internship I

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The half-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 4

Prerequisites

ACCT 1100
COMP 1000

All non-elective courses required for program completion

ACCT 2105 : Accounting Internship II

Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints the student with realistic work situations and provides insights into accounting applications on the job. Topics include: appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations, and development of productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, and weekly documentation or seminars and/or other projects as required by the instructor.

Credits 8

Prerequisites

ACCT 1100

COMP 1000

All non-elective courses required for program completion

ACCT 2125 : Capstone Review Accounting Principles

Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy.

Credits 3

Prerequisites

ACCT 1105

ACCT 1125

ACCT 1130

ACCT 2135 : Introduction to Government & Nonprofit Accounting

Provides an introduction to financial reporting and accounting principles for state/local governments and nonprofit entities.

Credits 3

Prerequisites

ACCT 1105

ACCT 2140 : Legal Environment of Business

Introduces law and its relationship to business. Topics include: legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

Credits 3

Prerequisites

Program Admission

ACCT 2145 : Personal Finance

Introduces practical applications of concepts and techniques used to manage personal finance.

Topics include: cash management, time value of money, credit, major purchasing decisions, insurance, investments, retirement, and estate planning.

Credits 3

Prerequisites

Program Admission

ACCT 2155 : Principles of Fraud Examination

Provides instruction of the basic principles and theories of occupational fraud. Topics include: fraud concepts, skimming, cash larceny, billing schemes, check tampering, payroll schemes, expense reimbursement schemes, register disbursement schemes, non-cash assets fraud, corruption schemes, and accounting principles and fraud.

Credits 3

Prerequisites

Program Admission

AMCA - Advanced Machine Tool

Advanced Machine Tool Course Descriptions

AMCA 2110 : CNC Fundamentals

Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety, Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

Credits 4

AMCA 2130 : CNC Mill Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2150 : CNC Lathe Manual Programming

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

Credits 5

Prerequisites

AMCA 2110

AMCA 2170 : CNC Practical Applications

Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

Credits 4

Prerequisites

AMCA 2110

AMCA 2130

AMCA 2150

AMCA 2190 : CAD/CAM Programming

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

Credits 4

Prerequisites

AMCA 2110

AIRC - Air Conditioning Technology

Air Conditioning Technology ACT2

Type

Diploma

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a

combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology diploma and have the qualification of an air conditioning technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 43 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4

AIRC 1090	Troubleshooting Air Conditioning Systems	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	51

Advanced Commercial Refrigeration AC81

Type

Technical Certificate of Credit

The Advanced Commercial Refrigeration TCC is a sequence of courses that prepares diploma or degree graduates or air conditioning technicians for careers in the commercial refrigeration air conditioning industry. The program emphasizes a combination of theory and practical application necessary of successful employment. Program graduates receive an Advanced Commercial Refrigeration Technical Certificate of Credit.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 2070	Commercial Refrigeration Design	4
AIRC 2080	Commercial Refrigeration Application	4
AIRC 2090	Troubleshooting and Servicing Commercial Refrigeration	4
	Minimum Credit Hours for Graduation	12

Air Conditioning Electrical Technician ACK1

Type

Technical Certificate of Credit

The Air Conditioning Electrical Technician program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components & Control	4
	Minimum Credit Hours for Graduation	12

Air Conditioning Repair Specialist ACY1

Type

Technical Certificate of Credit

The Air Conditioning Repair Specialist TCC is a series of courses designed to prepare students for positions in the maintenance and repair of air conditioning systems. A combination of theory and practical application provide for the necessary skills to support industry requirements.

Required Courses — 20 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1070	Gas Heat	4
AIRC 1080	Heat Pumps and Related Systems	4
	Minimum Credit Hours for Graduation	20

Air Conditioning Technician Assistant AZ31

Type

Technical Certificate of Credit

The Refrigeration Technician Assistant TCC is a series of courses that prepares students to hold positions as refrigeration technician assistants.

Required Courses — 12 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles & Practices	4
AIRC 1020	Refrigeration Systems Components	4
	Minimum Credit Hours for Graduation	12

Residential Air Conditioning Technician RA21

Type

Technical Certificate of Credit

The Residential Air Conditioning Technician TCC is a series of courses designed to prepare students for entry-level positions in the maintenance and repair of residential air conditioning systems.

Required Courses — 16 Hours

Item #	Name	Credits
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air Conditioning Systems Application & Installation	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4
	Minimum Credit Hours for Graduation	16

Air Conditioning Technology Course Descriptions

AIRC 1005 : Refrigeration Fundamentals

Introduces the basic concepts, theories, and safety regulations and procedures of refrigeration. Topics include an introduction to OSHA, safety, first aid, laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigerant cycle, refrigerant identification, and types of AC systems

Credits 4

AIRC 1010 : Refrigeration Principles & Practices

This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1020 : Refrigeration Systems Components

This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, and evaporators, metering devices, service procedures, refrigeration systems and safety.

Credits 4

Corequisites

AIRC 1005

AIRC 1010

AIRC 1030 : HVACR Electrical Fundamentals

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety

Credits 4

AIRC 1040 : HVACR Electrical Motors

This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

Credits 4

Corequisites

AIRC 1030

AIRC 1050 : HVACR Electrical Components & Control

Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

Credits 4

AIRC 1060 : Air Conditioning Systems Application & Installation

Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1070 : Gas Heat

This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

Credits 4

Prerequisites

AIRC 1030

AIRC 1080 : Heat Pumps and Related Systems

This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 1090 : Troubleshooting Air Conditioning Systems

This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

Credits 4

Prerequisites

AIRC 1010

AIRC 1030

AIRC 1005

AIRC 2050 : GA State&Local Resid AC Codes

Presents advanced-level residential air conditioning code concepts and theories. Topics include local residential air conditioning codes, state residential air conditioning codes, gas piping, refrigeration piping, and safety.

Credits 3

Prerequisites

AIRC 1090

Corequisites

AIRC 1090

AIRC 2070 : Commercial Refrigeration Design

Provides an increased level of concepts and theory beyond ACT 102. Students are introduced to more design theory in commercial refrigeration. Topics include: refrigeration heat calculation, equipment selection, refrigeration piping, codes, and safety.

Credits 4

AIRC 2080 : Commercial Refrigeration Application

Introduces the application of fundamental theories and concepts of refrigeration. Emphasis will be placed on equipment application and installation procedures.

Topics include: equipment application, installation procedures, cycle controls, energy management, and safety.
Credits 4

AIRC 2090 : Troubleshooting and Servicing Commercial Refrigeration

Continues to provide experience in maintenance techniques in servicing light commercial refrigeration systems. Topics include: system clearing, troubleshooting procedures, replacement of components, and safety.
Credits 4

ASTT - Aircraft Structural Technology

Aircraft Structural Technology Course Descriptions

ASTT 1010 : Basic Blueprint Reading

This course introduces basic blueprint reading. Emphasis will be placed on reading and interpreting blueprints found in a manufacturing environment.

Topics include: lines and symbols, orthographic drawings, views, material, form and position, title blocks, sketching, features, and sections.

Credits 4

ASTT 1020 : Aircraft Blueprint Reading

This course introduces aerospace specific blueprint information which builds on a basic knowledge of blueprint terminology and symbols. Topics include: dimensioning standards and practices, blueprint components, interpretation of reference planes and coordinate systems, engineering numbering and revision system, body/field of the drawing, detail drawing, configured/method/undimensioned drawings.

Credits 3

Corequisites

ASTT 1010

ASTT 1030 : Structural Fundamentals

Introduces the fundamental concepts required in aerospace structural manufacturing and repair. Emphasis is placed on safety, quality, and precision. Topics include: safety, flat pattern layout, quality standards, fasteners, hand tools, and precision measuring instruments.

Credits 6

Corequisites

ASTT 1010

ASTT 1070 : Aerodynamics

This course presents the theory of flight and aircraft design as it applies to the manufacturing and repair processes. Topics include: terminology, theory of flight, structural design, control surfaces, and stress and fatigue.

Credits 2

ACRP - Automotive Collision

Auto Collision Repair ACR2

Type

Diploma

The Automotive Collision Repair Program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair, automotive painting and refinishing, or mechanical and electrical systems depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma which qualifies them as major collision repair technicians, painting and refinishing technicians or mechanical and electrical helpers.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3

EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4

Specialization: Mechanical Electrical Helper 8MH2 — 9 Hours

Item #	Name	Credits
ACRP 1017	Mechanical & Electrical Systems I	4
ACRP 1019	Mechanical & Electrical Systems II	5

Specialization: Refinishing 8RS2 — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5

Specialization: Major Collision Repair 8MC2 — 10 Hours

Item #	Name	Credits
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		37

Automotive Collision Repair Assistant I AB51 Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement and automotive welding techniques.

For more information regarding this program including job placement rate, on-time graduation rate, costs, occupational information, etc., Please Click Here.

Required Courses — 12 Hours

Item #	Name	Credits
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Auto Components Repair & Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4

Minimum Credit Hours for Graduation 12

Automotive Collision Repair Assistant II AZ51 Type

Technical Certificate of Credit

The Automotive Collision Repair Assistant II certificate program is an advanced certificate option a student can complete after finishing the Automotive Collision Repair Assistant I program. Topics covered include collision repair tools and equipment, hydraulic systems, damage analysis and estimations, frame straightening, and conventional/unibody structural panel repairs and replacement.

Required Courses — 15 Hours

Item #	Name	Credits
ACRP 1010	Foundations of Collision Repair	5
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
Minimum Credit Hours for Graduation		15

Automotive Refinishing Assistant II AP71 Type

Technical Certificate of Credit

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing

specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching of colors.

Required Courses — 10 Hours

Item #	Name	Credits
ACRP 2001	Introduction to Auto Painting & Refinishing	5
ACRP 2002	Paint & Refinishing Techniques	5
Minimum Credit Hours for Graduation		10

Automotive Collision Course Descriptions

ACRP 1000 : Introduction to Auto Collision Repair

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces vehicle construction types and the parts identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks

Credits 4

ACRP 1005 : Auto Components Repair & Replacement

This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

Credits 4

Corequisites

ACRP 1000

ACRP 1010 : Foundations of Collision Repair

This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques

Credits 5

ACRP 1015 : Fundamentals of Automotive Welding

This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

Credits 4

Corequisites

ACRP 1000

ACRP 1017 : Mechanical & Electrical Systems I

This course introduces suspension and steering, braking, and drive train systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 4

Corequisites

ACRP 1000

ACRP 1019 : Mechanical & Electrical Systems II

This course introduces the various electrical, heating and AC, engine cooling, fuel and intake, and restraint systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

Credits 5

Corequisites

ACRP 1000

ACRP 2000 : Introduction to Refinishing

This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2001 : Introduction to Auto Painting & Refinishing

This course covers the safety precautions followed during the painting and refinishing processes used in a shop during collision repairs. Basic surface preparations will be discussed and practiced. Spray gun types and basic operations will also be introduced.

Credits 5

Corequisites

ACRP 1000

ACRP 1010

ACRP 2002 : Paint & Refinishing Techniques

This course covers the fundamental refinishing tasks of mixing, matching and applying various types of automotive paints. Paint defect causes and cures will be examined in depth. Final delivery detailing and tasks will also be practiced and discussed

Credits 5

ACRP 2005 : Fundamentals of Refinishing I (Dual Enrollment Only)

The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

Credits 5

ACRP 2009 : Refinishing Internship

Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2001

ACRP 2002

ACRP 2010 : Major Collision Repair

This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course also provides instruction on the hydraulic repair systems, analysis, estimating and measurement of automobile frames and bodies.

Credits 5

Prerequisites

ACRP 1000

Corequisites

ACRP 1005

ACRP 2015 : Major Collision Replacements

This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

Credits 5

Prerequisites

ACRP 1000

ACRP 2019 : Major Collision Repair Internship

Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

Credits 2

Prerequisites

ACRP 1000

Corequisites

ACRP 2010

ACRP 2015

AUTT - Automotive Technology

Automotive Fundamentals AF12

Type
Diploma

The Automotive Fundamentals Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition,

retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Fundamentals diploma that qualifies them as entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 32 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
	Minimum Credit Hours for Graduation	40

Automotive Technology AT14

Type
Diploma

The Automotive Technology Diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology diploma that qualifies them as well rounded entry-level technicians.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7

AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Auto Suspension/Steering Systems	4
AUTT 1060	Auto Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
	Minimum Credit Hours for Graduation	55

Auto Electrical/Electronic Systems Technician AE41

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic automotive systems as an entry level technician. Topics covered include automotive shop safety, electrical theory and circuit diagnosis, automotive batteries, starting and charging systems, instrumentation, lighting, and various vehicle accessories.

Required Courses — 9 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
	Minimum Credit Hours for Graduation	9

Automotive Chassis Technician Specialist ASG1

Type

Technical Certificate of Credit

The Automotive Chassis Technician Specialist certificate program provides students with skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Required Courses — 17 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Auto Suspension/Steering Systems	4
	Minimum Credit Hours for Graduation	17

Automotive Climate Control Technician AH21

Type

Technical Certificate of Credit

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop

safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Required Courses — 14 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Auto Climate Control Systems	5
	Minimum Credit Hours for Graduation	14

Automotive Engine Performance Technician AE51

Type

Technical Certificate of Credit

The Automotive Engine Performance Technician certificate program introduces the student to the knowledge and skills they will need as entry-level automotive engine performance technicians. Topics include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

Required Courses — 16 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7

AUTT 1040	Automotive Engine Performance	7
	Minimum Credit Hours for Graduation	16

Automotive Engine Repair Technician AE61

Type

Technical Certificate of Credit

The Automotive Engine Repair Technician certificate program provides the student with entry-level automotive engine repair skills. Topics include: basic shop safety, basic electrical/electronic diagnosis, principles of engine operation, basic engine diagnosis, and basic engine repair procedures.

Required Courses — 15 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6
	Minimum Credit Hours for Graduation	15

Automotive Maintenance and Light Repair Technician ALR1

Type

Technical Certificate of Credit

The Automotive Maintenance and Light Repair TCC prepares students for entry level maintenance and repair positions in auto service shops. Students will learn the basic repair and

maintenance operations in all eight ASE areas of passenger vehicles and light trucks. Graduates of this TCC will be able to pursue master level auto knowledge in the auto technology diploma or degree programs.

* Dual Enrollment Only

Occupational Courses — 20 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1011	Basic Auto Maintenance and Light Repair	6
AUTT 1012	Auto Maintenance and Light Repair II	6
AUTT 1013	Auto Maintenance and Light Repair III	6
	Minimum Credit Hours for Graduation	20

Automotive Transmission/Transaxle Tech Specialist AA71

Type

Technical Certificate of Credit

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry-level transmission, transaxle, and driveline technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials

operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

Required Courses — 18 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Manual Drive Train & Axles	4
AUTT 2030	Automatic Transmissions & Transaxles	5
	Minimum Credit Hours for Graduation	18

Electrical Vehicle Professional EVP1

Type

Technical Certificate of Credit

The Electric Vehicle Professional Technical Certificate of Credit was designed in conjunction with Hyundai subject matter experts to provide students with the knowledge and skill to prepare them for entry level employment in the electrical vehicle production industry. Emphasis is placed on safe and effective automotive shop operations, automotive electrical principles, and operation and service procedures for EV and Hybrid vehicles. This certificate prepares the student to enter into the electrical vehicle production industry with basic knowledge.

Occupational Courses — 8 Hours

Item #	Name	Credits
AUTT 1010	Introduction to Automotive Technology	2
AUTT 1015	Automotive Electrical Principles	3
AUTT 2105	Introduction to EV/Hybrid Vehicles & Safety Protocols	3
	Minimum Credit Hours for Graduation	8

Automotive Technology Course Descriptions

AUTT 1010 : Introduction to Automotive Technology

Introduces basic concepts and practices necessary for safe and effective automotive shop operations. Topics include: safety procedures; legal/ethical responsibilities; general service; hand tools; shop organization, management, and work flow systems
Credits 2

AUTT 1011 : Basic Auto Maintenance and Light Repair

This course introduces student to basic automotive system checks and inspection procedures practiced in virtually all service shops. Fundamental service procedures are also covered.
Credits 6
Corequisites
AUTT 1010

AUTT 1012 : Auto Maintenance and Light Repair II

This course exposes students to the basic maintenance procedures and light repair operations performed by auto technicians on a regular basis on all eight areas of the vehicle.
Credits 6
Prerequisites
AUTT 1010
AUTT 1011

AUTT 1013 : Auto Maintenance and Light Repair III

This course allows students to further study and practice basic maintenance procedures and diagnostic tests in all eight areas of light vehicle service.
Credits 6
Prerequisites
AUTT 1012

AUTT 1015 : Automotive Electrical Principles

This course introduces automotive electrical principles emphasizing basic electrical circuit laws and diagnosis and service/repair of 12V batteries.
Credits 3
Corequisites
AUTT 1010

AUTT 1020 : Automotive Electrical Systems

This course introduces automotive electrical systems emphasizing the basic operating principles, diagnosis, and service/repair of batteries, starting systems, charging systems, lighting systems, instrument cluster and driver information systems, and body electrical system.
Credits 7
Prerequisites
AUTT 1010

AUTT 1030 : Automotive Brake Systems

This course introduces brake systems theory and its application to automotive braking systems and anti-lock brake system (ABS). Topics include hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; related systems (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; and electronic brake control systems.
Credits 4
Prerequisites
AUTT 1010

AUTT 1040 : Automotive Engine Performance

This course introduces basic engine performance systems, which support and control four stroke gasoline engine operations and reduce emissions. Topics include general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, and emission control systems diagnosis and repair.
Credits 7
Prerequisites
AUTT 1020

AUTT 1050 : Auto Suspension/Steering Systems

This course introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair; and wheel and tire diagnosis and repair.
Credits 4
Prerequisites
AUTT 1010

AUTT 1060 : Auto Climate Control Systems

This course introduces the theory and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; and refrigerant recovery, recycling, and handling.

Credits 5

Prerequisites

AUTT 1020

AUTT 2010 : Automotive Engine Repair

This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

Credits 6

Prerequisites

AUTT 1010

AUTT 2020 : Manual Drive Train & Axles

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

Credits 4

Prerequisites

AUTT 1010

AUTT 2030 : Automatic Transmissions & Transaxles

Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

Credits 5

Prerequisites

AUTT 1020

AUTT 2105 : Introduction to EV/ Hybrid Vehicles & Safety Protocols

This course introduces experienced automotive technicians to the differences in operation and service procedures for EV and Hybrid vehicles. The fundamental safety protocols that must be observed when performing service procedures on these types of vehicles are also addressed in detail. Topics include review of electrical/electronic system principles, types of EV/Hybrid vehicles in the market, safety equipment, PPE and special tooling, and standard EV/Hybrid shop safety protocols.

Credits 3

Corequisites

AUTT 1010

AVIO - Avionics Maintenance Technology

Basic Avionics Technician BAT1

Type

Technical Certificate of Credit

— 27 Hours

Graduates can expect to find employment in the aviation industry as an entry-level avionics technician or avionics technician's assistant working under the direct supervision of an Avionics Maintenance Technician.

Job Titles Include: Entry-level Avionics Technician or Avionics Technician Assistant

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3

MATH 1013	Algebraic Concepts	3
EMPL 1000	Interpersonal Relations & Professional Development	2
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
	Minimum Credit Hours for Graduation	27

Avionics Maintenance Technology Course Descriptions

AVIO 1010 : Basic Electronics

Provides a review of the basic theory and application of electronics with a primary focus on use in avionic systems. Topics include: atomic theory, DC circuits, AC circuits, alternating current, inductance and transformers, capacitance, resonance and filters, vacuum tubes, and solid state devices.
Credits 4

AVIO 1020 : Avionics Maintenance Practices

Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.
Credits 3

Corequisites
AVIO 1010

AVIO 1030 : Advanced Electronics

Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.
Credits 4

Prerequisites
AVIO 1010

AVIO 1040 : Digital Electronics

Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.
Credits 4

Prerequisites
AVIO 1010

AVIO 1060 : Aircraft Logic Systems

Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.
Credits 4

Prerequisites
AVIO 1040

FISH - Basic Commercial Fisherman

Basic Commercial Fisherman BCF1

Type

Technical Certificate of Credit

The Basic Commercial Fisherman Certificate is for those wanting to begin a career in commercial fishing, covering essential subjects that will better prepare participants to serve as a crew member aboard a commercial fishing vessel in the region. Commercial fishermen in Georgia using a variety of gear including trawls, cast nets, hook and line and traps to catch fish, shrimp, crab and other marine life that will be consumed by humans or used as animal feed or bait. Commercial fishing has a long rich history along Georgia's coast and despite many challenges the industry has faced in recent decades, it remains an economically and culturally important component of several coastal communities.

*** Dual Enrollment Only**

Required Courses — 12 Hours

Item #	Name	Credits
FISH 1001	Basic Health & Safety in Commercial Fishing	3
FISH 1002	Seamanship and Watchkeeping	3
FISH 1003	Basic Commercial Fishing Practices	3
FISH 1004	Introduction to Fisheries Science and Management	3

Basic Commercial Fisherman Course Descriptions

FISH 1001 : Basic Health & Safety in Commercial Fishing

The Basic Health and Safety course aims to provide with the knowledge and skills required to work safely on board a commercial fishing vessel. The course covers basic health and safety issues, CPR, personal protective equipment, as well as firefighting and fire prevention.

Credits 3

Prerequisites

Program Admission.

FISH 1002 : Seamanship and Watchkeeping

The Seamanship and Watchkeeping course provides students with the knowledge of the fishing vessel, the skills and techniques required for operating a commercial fishing vessel.

Topics include weather reading, radio communication, and signals and navigation of the vessel.

Credits 3

Prerequisites

Program Admission.

FISH 1003 : Basic Commercial Fishing Practices

This course provides an understanding and familiarity with common commercial fishing practices and gear relevant to commercial fishing in the region.

Topics include fishing gear, operations, deck handling, electronic equipment, basic maintenance and product marketing.

Credits 3

Prerequisites

Program Admission.

FISH 1004 : Introduction to Fisheries Science and Management

The Introduction to Fisheries Science and Management course provides students with a basic knowledge and understanding of regional fish species and the licensing and management of a commercial fishing operation.

Topics include biology of fish species, life history of species, commercial fishing regulations, commercial fishing licensing, and financial management.

Credits 3

Prerequisites

Program Admission.

BIOL - Biology

Biology Course Descriptions

BIOL 1111 : Biology I

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 3

Corequisites

BIOL 1111L

BIOL 1111L : Biology Lab I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, biotechnology, and evolution.

Credits 1

Corequisites

BIOL 1111

BIOL 1112 : Biology II

Provides an introduction to basic animal and plant diversity, structure and function, including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 3

Prerequisites

BIOL 1111

BIOL 1111L

Corequisites

BIOL 1112L

BIOL 1112L : Biology Lab II

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

Credits 1

Corequisites

BIOL 1112

BIOL 2107 : Biological Principles I

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

Credits 3

Corequisites

ENGL 1101

BIOL 2107L

BIOL 2107L : Biological Principles I Lab

This course is comprised of selected laboratory exercises that parallel the topics covered in BIOL2107 and is in-tended for students majoring in biological or other sciences. The course provides a hands-on approach to fundamental biological processes and interactions occurring at the molecular, cellular levels, and organismal, and population levels of organization. The laboratory exercises for this course include: laboratory safety; scientific method and investigation; microscopy; basic biochemistry; cell biology; bioenergetics; molecular genetics; principles of inheritance; evolution and natural selection.

Credits 1

Corequisites

ENGL 1101

BIOL 2107

BIOL 2113 : Anatomy and Physiology I

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

Credits 3

Corequisites

ENGL 1101

BIOL 2113L

BIOL 2113L : Anatomy & Physiology Lab I

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

Credits 1

Corequisites

ENGL 1101

BIOL 2113

BIOL 2114 : Anatomy and Physiology II

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 3

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114L

BIOL 2114L : Anatomy & Physiology Lab II

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

Credits 1

Prerequisites

BIOL 2113

BIOL 2113L

Corequisites

BIOL 2114

BIOL 2117 : Introductory Microbiology

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

Credits 3

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117L

BIOL 2117L : Introductory Microbiology Lab

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

Credits 1

Prerequisites

[BIOL 2113](#), [BIOL 2113L](#) or [BIOL 1111](#), [BIOL 1111L](#).

Corequisites

BIOL 2117

BUSN - Business Healthcare Technology

Business Healthcare Technology BHT3

Type

Associate of Applied Science, AAS

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Associate of Applied Science degree.

* Students must choose either a Compliance and Reimbursement Specialization or a Business Healthcare Specialization

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits

MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 26 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Compliance and Reimbursement Specialization 8C83 — 15 Hours

Item #	Name	Credits
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 2810	Healthcare Compliance	3
BUSN 2850	Health Record Auditing	3

Business Healthcare Specialization 8BH3 — 15 Hours

Item #	Name	Credits
Guided Electives		
	Minimum Credit Hours for Graduation	63

Business Healthcare Technology BHT2 Type Diploma

The Business Healthcare Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Healthcare Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of software and technology. Students are also introduced to accounting

fundamentals, electronic communications, internet research, electronic file management, and healthcare regulation and compliance. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Healthcare Technology Diploma.

General Education Courses — 8-9.00 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	
	MATH 1011 or MATH 1012	3

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3

Occupational Courses — 33 Hours

Item #	Name	Credits

BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6
	Occupational-Guided Electives (7 hrs)	7

Accounting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 2200	Office Accounting	4
ACCT 1100	Financial Accounting I	4
	Minimum Credit Hours for Graduation	46

Healthcare Billing and Coding Specialist HBC1

Type
Technical Certificate of Credit

Healthcare Billing and Coding Specialist program provides a basic short-term academic credential with the potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in

their occupations or who want to prepare for full-time or part-time employment in the medical field. The Healthcare Billing and Coding Specialist program provides basic training in anatomy, medical terminology, human pathology, insurance reimbursement, and diagnostic and procedural coding skills.

Required Courses — 28 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 1440	Document Production	4
BUSN 2350	Electronic Health Records	3
BUSN 2400	Healthcare Procedural Coding	3
BUSN 2410	ICD Coding	3
BUSN 2420	Advanced Medical Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	31

Healthcare Billing and Reimbursement Assistant HBA1

Type
Technical Certificate of Credit

The program provides instruction in medical facility reimbursement and compliance regulations.

Required Courses — 15 Hours

Item #	Name	Credits
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2350	Electronic Health Records	3
BUSN 2375	Healthcare Coding	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	18

Healthcare Office Assistant HFA1

Type
Technical Certificate of Credit

The Healthcare Office Assistant certificate is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related area. Technical courses apply to the degree or diploma program in Business Healthcare Technology.

Required Courses — 23 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 1015	Introduction to Healthcare Reimbursement	3
BUSN 2340	Healthcare Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 1010	Medical Terminology, Anatomy, and Diseases for Business	6

Technology Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
BUSN 1000	Computers in Healthcare	3
COMP 1000	Introduction to Computer Literacy	3
	Minimum Credit Hours for Graduation	26

BCST - Business Technology

Business Technology BA23

Type

Associate of Applied Science, AAS

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Technology, Associate of Applied Science degree.

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 45 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3

BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3
MGMT 1100	Principles of Management	3
	Specific Occupational-Guided Electives (6 credits)	6

Select ONE of the following — 4 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4
	Minimum Credit Hours for Graduation	64

Business Technology BA22

Type
Diploma

The Business Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and

presentation software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

General Education Core — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3
	MATH 1011 or MATH 1012	3

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN 2190	Business Document Proofreading & Editing	3

Financial Accounting — 4 Hours

Choose one of the following courses:

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
BUSN 2200	Office Accounting	4

Business Administrative Assistant Specialization - 8BA2 — 24 Hours

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
	Specific Occupational-Guided Electives (6 credits)	6

Medical Administrative Assistant Specialization - 8M12 — 24 Hours

Item #	Name	Credits
MAST 1120	Human Disease	3
BUSN 2340	Healthcare Administrative Procedures	4

Select BUSN 2375 or BUSN 2370	3
Select ALHS 1010, ALHS 1011, or BUSN 2310	3
Select BUSN 2300 or ALHS 1090	2
Electives (9 credits)	9
Minimum Credit Hours for Graduation	50

Administrative Support Assistant AS21

Type

Technical Certificate of Credit

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, and office procedures. The course prepares students for the MOS: Microsoft Office Word certification testing.

Required Courses — 20 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	20

Microsoft Office Applications Professional MF41

Type

Technical Certificate of Credit

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers, as well as, prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

Required Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts & Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	22

Microsoft Word Application Professional MWA1

Type

Technical Certificate of Credit

This certificate program provides students with the knowledge and skills to perform word processing applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
	Specific Occupational-Guided Electives (3 credits)	3
	Minimum Credit Hours for Graduation	14

Technical Specialist TC31

Type

Technical Certificate of Credit

The purpose of this certificate is to prepare students for positions in a business that requires technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

Occupational Guided Electives — 6 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ENGL 1101	Composition and Rhetoric	3

Occupational Guided Electives (9-12 hrs.) Specified by college advisor — 9-12.00 Hours

Item #	Name	Credits
	Occupationally Related Electives	

Humanities/Fine Arts — 6 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Natural Sciences/ Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

General Education Core Elective — 6-12.00 Hours

* Choose one additional course
from the complete Area I, II, III,
or IV listings:

[General Education Courses](#)

Minimum Credit Hours for Graduation	30-39

Business Technology Course Descriptions

BCST 1000 : Interpersonal Development

This course helps the student to develop self-actualization skills. It includes skill development to: work together effectively in a team, identify the steps involved in the job interviewing and job search process, appreciate difficult customers and provides the student with skills to calm angry customers and to resolve their problems, create an awareness of the importance of image, become more comfortable dealing with conflict situations, and to better understand and serve multicultural customers, both internal customers (co-workers) or external customers.

Credits 2

BCST 1010 : Survey of Technology

This course provides the student with an introduction to computer use and the Microsoft operating environment. It is designed as a guide for the beginner. Topics include working in the Windows operating environment, word processing, spreadsheets, databases and electronic animated presentations.

Credits 3

BCST 1020 : Office Management

This course provides the student with basic principles of operating a business, using numbers in business to perform many calculations, draft concise, easy-to-read business correspondence, help participants to identify, prioritize and re-prioritize tasks as situations arise and change and introduce a systematic problem-solving process to be applied in a customer service setting.

Credits 2

BCST 1030 : Advanced Office Management

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers using business language, developing rapport with customers, problem solving in customer service, telephone skills, and sales skills in the service environment.

Credits 2

BUSN 1000 : Computers in Healthcare

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

Credits 3

**BUSN 1000 or COMP 1000 :
Computers in Healthcare Or Intro
to Computer Literacy**

[BUSN 1000](#)

Introduces the fundamental concepts, terminology, and operations necessary to use computers in a business healthcare setting. Emphasis is placed on familiarity with basic computer functions and computer use; the role of the information technology in business healthcare decision-making; and legal, ethical, and privacy issues related to computer use in the business healthcare environment. Topics include an introduction to computer terminology, the Windows environment, Cloud computing, data security, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

OR

[COMP 1000](#)

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.
Credits 3

BUSN 1010 : Medical Terminology, Anatomy, and Diseases for Business

Focuses on medical terminology, anatomy, and diseases and disorders of each major human body system: Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, Endocrine System, Cardiovascular System, Lymphatic System, Respiratory System, Digestive System, Urinary System, Reproductive Systems of the Male and Female, and Development, Heredity, and Genetics.

Credits 6

BUSN 1015 : Introduction to Healthcare Reimbursement

This course is designed to increase efficiency and streamline administrative procedures for healthcare insurance billing and reimbursement. Topics include documentation in the medical record, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

Credits 3

Prerequisites

Choose One of the Following:
[ALHS 1090](#), or [BUSN 1010](#), or [BUSN 2300](#)

BUSN 1100 : Introduction to Keyboarding

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors.

Credits 3

BUSN 1190 : Digital Technologies in Business

Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

Credits 2

Prerequisites

COMP 1000

BUSN 1240 : Office Procedures

Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents.

Credits 3

Prerequisites

COMP 1000

BUSN 1300 : Introduction to Business

Introduces organization and management concepts of the business world and in the office environment. Topics include business in a global economy, starting and organizing a business, enterprise management, marketing strategies and financial management.

Credits 3

BUSN 1340 : Customer Service Effectiveness

This course emphasizes the importance of customer service throughout all businesses. Topics include: customer service challenges and problem solving; strategies for successful customer service; effective communication and dealing with difficult customers; empowerment, motivation, and leadership; customer retention and satisfaction measurement; and excellence in customer service.

Credits 3

BUSN 1400 : Word Processing Applications

This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary, as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

Credits 4**Prerequisites**
COMP 1000**BUSN 1410 : Spreadsheet Concepts & Applications**

This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

Credits 4**Prerequisites**
COMP 1000**BUSN 1420 : Database Applications**

This course covers the knowledge and skills required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data, and managing and maintaining databases.

Credits 4**Prerequisites**
COMP 1000**BUSN 1430 : Desktop Publishing & Presentation Applications**

This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

Credits 4**Prerequisites**
COMP 1000**BUSN 1440 : Document Production**

Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management. Prerequisite BUSN 1000 or the ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Credits 4**Prerequisites**

The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors.

Corequisites
COMP 1000**BUSN 1800 : Introduction to Healthcare Accounting**

Course emphasizes the fundamentals of accounting and finance theory to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payment systems, capital investments, and budgeting.

Credits 3

BUSN 2160 : Electronic Mail Applications

This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

Credits 2**Prerequisites**

COMP 1000

BUSN 2170 : Web Page Design

This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

Credits 2**Prerequisites**

COMP 1000

BUSN 2190 : Business Document Proofreading & Editing

Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

Credits 3**Prerequisites**

ENGL 1010

Corequisites

BUSN 1440

BUSN 2200 : Office Accounting

Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts

Credits 4**BUSN 2210 : Applied Office Procedures**

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

Credits 3**Prerequisites**

BUSN 1240

BUSN 1400

BUSN 1410

BUSN 1440

Corequisites

BUSN 2190

BUSN 2200

ACCT 1100

[BUSN 2190](#) and [BUSN 2200](#) or [ACCT 1100](#)**BUSN 2230 : Office Management**

Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

Credits 3**Prerequisites**

BUSN 1240

BUSN 2240 : Business Administrative Assistant Internship I

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4**BUSN 2250 : Business Administrative Assistant Internship II**

Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6**BUSN 2290 : Applied Business Technology**

This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, records management skills, office management skills, and career readiness. This course serves as a capstone course.

Credits 3**Prerequisites**

BUSN 1240

BUSN 2300 : Medical Terminology

Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.
Credits 2

BUSN 2310 : Anatomy & Terminology for the Medical Administrative Assistant

Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.
Credits 3

BUSN 2320 : Medical Document Processing & Transcription

Provides experience in medical machine transcription working with the most frequently used medical reports. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, and pronunciation.
Credits 4

Prerequisites

[BUSN 2300](#) or [ALHS 1090](#), and [ALHS 1010](#) or [ALHS 1011](#), or [BUSN 2310](#), [BUSN 1440](#), [ENGL 1010](#) or [ENGL 1101](#)

BUSN 2330 : Adv. Medical Document Processing & Transcription

Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

Credits 4**Prerequisites**

[BUSN 2320](#)

BUSN 2340 : Healthcare Administrative Procedures

Emphasizes essential skills required for the business healthcare office. Introduces the knowledge, skills, and procedures needed to understand billing purposes. Introduces the basic concept of business healthcare administrative assisting and its relationship to the other health fields. Emphasizes healthcare regulations and ethics; and, the healthcare administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior.

Topics include: introduction to business healthcare procedures, healthcare regulations ethics, healthcare records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

Credits 4**Prerequisites**

[BUSN 1010](#)

OR either

[BUSN 2300](#) or [ALHS 1090](#), and one of [BUSN 2310](#) or [ALHS 1011](#)

Technology:

[BUSN 1000](#) or [COMP 1000](#)

Corequisites

[BUSN 1440](#)

BUSN 2350 : Electronic Health Records

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of electronic health records, and computerized office management. Topics include: electronic healthcare information management, electronic data interchange, coding standards, health record and office management software, point of entry data entry, electronic coding from health records, speed data entry in processing healthcare records, analysis of records to improve patient care, confidentiality, release of information, security of electronic healthcare record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation, customizing medical documents, claims management, collections management, and HIPAA security.

Credits 3**Prerequisites**

BUSN 1010

Or either: [BUSN 2300](#) or [ALHS 1090](#); and one of [BUSN 2310](#) or [ALHS 1011](#)

For the Technology Requirement Select: [BUSN 1000](#) or [COMP 1000](#).

BUSN 2375 : Healthcare Coding

Provides an introduction to medical coding skills and the application of international coding standards as it applies to healthcare billing for insurance purposes. Topics include: current procedural terminology, International Classification of Diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, and collections.

Credits 3**Prerequisites**

BUSN 1010

OR one of the following options:

[BUSN 2300](#) or [ALHS 1090](#), and [BUSN 2310](#), or [ALHS 1011](#)

BUSN 2380 : Medical Administrative Assistant Internship I

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 4**Prerequisites**

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2390 : Medical Administrative Assistant Internship II

Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Technology program faculty and/or persons designated to coordinate work experience arrangements.

Credits 6**Prerequisites**

Student must be in the last semester of program. With advisor approval, may take concurrently with last semester courses.

BUSN 2400 : Healthcare Procedural Coding

Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physician's Current Procedural Terminology (CPT) resources and the Healthcare Common Procedure Coding System (HCPCS). Topics include: format of CPT/HCPCS manual, CPT/HCPCS coding guidelines, and coding using the CPT/HCPCS resources. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes and apply systems to optimize reimbursement.

Credits 3

Prerequisites
BUSN 1010

Or

[BUSN 2300](#) or [ALHS 1090](#)
and [BUSN 2310](#) or [ALHS 1011](#) and [MAST 1120](#)

BUSN 2410 : ICD Coding

Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

Credits 3

Prerequisites

BUSN 1010

[BUSN 2300](#) or [ALHS 1090](#) and
[BUSN 2310](#) or [ALHS 1011](#) and
[MAST 1120](#)

BUSN 2420 : Advanced Medical Coding

This course is a continuance of CPT and ICD coding. Topics include: health records coding techniques, coding linkage and compliance, searching the job market, developing a resume, stress management, test-taking strategies, and reviewing for a coding certification exam.

Credits 3

Prerequisites

BUSN 2400

BUSN 2410

BUSN 2440 : Healthcare Leadership & Professional Effectiveness

Emphasizes essential skills required for leadership and professional success in healthcare organizations. Introduces the functions, practices, and advanced interpersonal relationships, critical thinking, and problem solving. Provides the student with knowledge and the essentials of professional leadership behaviors. Topics include: introduction to the supervisory role, the volatile healthcare environment, the dual nature of supervisory roles, basic functions of management, delegation, empowerment, self-management, interviewing, recruitment, professionalism, decision making managing change, professional meetings, quality, productivity, teams, and continuing education.

Credits 3

Corequisites

BUSN 2340

BUSN 2460 : Healthcare Organizational Behavior & Theory

Emphasizes essential skills required for the management of healthcare practices. Introduces the functions, practices, and advanced administrative skills. Emphasis is placed on management skills including practice management, personnel supervision, marketing, financial planning, and addressing health disparities. Provides the student with knowledge and the essentials of professional managerial behavior. Topics include: introduction to organizational behavior, diversity in health care, attitudes and perceptions, workplace communication, theories of motivation, leadership, conflict management, groups and group dynamics, team and team building, organizational development, and change theory.

Credits 3

Corequisites

BUSN 2340

BUSN 2810 : Healthcare Compliance

This course covers how healthcare law and related regulations are formulated, and the impact of those laws on payers, providers, patients, and healthcare businesses. Emphasis is placed on legal compliance in the healthcare industry. Topics covered included in-depth coverage and analysis of implementation of the healthcare reform law, fraud and abuse laws, anti-kickback, false claims, Stark anti-referral provisions, Medicare and Medicaid, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the HITECH Act and related regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA).

Credits 3**Prerequisites**

BUSN 1010

OR one of [BUSN 2300](#) or [ALHS 1090](#), and [ENGL 1010](#), or [ENGL 1101](#).**BUSN 2850 : Health Record Auditing**

This course provides an introduction to the principles of medical auditing. Emphasis will be placed on key areas of regulation, medical record documentation, chart abstraction, and developing coding compliance plans. Topics include: coding compliance, importance of documentation, medical necessity, coding compliance programs, auditing, auditing prevention techniques, and emerging technologies.

Credits 3**Prerequisites**

BUSN 2340

[BUSN 2375](#) or [BUSN 2370](#)**COMP 1000 : Introduction to Computer Literacy**

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

Credits 3**MGMT 1120 : Introduction to Business**

This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing.

Credits 3**MGMT 2210 : Project Management**

Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition, and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between the project team and other organizations; critical path methodology; and total quality management.

Credits 3**MKTG 2500 : Exploring Social Media**

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: the history of the internet and social media, social media dashboards, legal issues of social media, outsourcing vs. in-house administration, and the current social media ecosystem including applications in the following areas: communication, collaboration/authority building, multimedia, reviews and opinions, and entertainment.

Credits 3**Corequisites**

MKTG 1100

Carpentry

Carpentry Course Descriptions

CARP 1000 : Fundamental Carpentry Skills

Fundamental Carpentry Skills provides the basic carpentry instruction all other carpentry skills build upon. Topics include orientation to the trade, materials and fasteners, hand and power tools, drawings and specifications, building layout, and building foundations.

Credits 3

CARP 1015 : Structural Framing I
Structural Framing describes the layout and construction procedures for floor, wall, and stair systems, including how to read and interpret construction drawings and specifications, and how to identify different types of framing systems, components, and system materials. It also covers how to estimate the amount of materials needed for an assembly and on some common alternative framing systems.

Credits 3
Prerequisites
CARP 1000
COFC 1080

CHEM - Chemistry

Chemistry Course Descriptions

CHEM 1151 : Survey of Inorganic Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 3
Prerequisites
[MATH 1111](#) or [MATH 1101](#)
Corequisites
CHEM 1151L

CHEM 1151L : Survey of Inorganic Chemistry Lab

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

Credits 1
Prerequisites
[MATH 1111](#) or [MATH 1101](#)
Corequisites
CHEM 1151

CHEM 1152 : Survey of Organic Biochemistry

Credits 3
Prerequisites
CHEM 1151
CHEM 1151L
Corequisites
CHEM 1152L

CHEM 1152L : Survey of Organic Biochemistry Lab

Selected laboratory exercises paralleling the topics in CHEM 1152. The laboratory exercises for this course include basic principles of organic chemistry, hydrocarbons, hydrocarbon derivatives, heterocyclic rings and alkaloids, carbohydrates, lipids and fats, proteins, nucleic acids, and intermediary metabolism.

Credits 1
Prerequisites
CHEM 1151
CHEM 1151L
Corequisites
CHEM 1152

CHEM 1211 : Chemistry I

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

Credits 3
Prerequisites
[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).
Corequisites
CHEM 1211L

CHEM 1211L : Chemistry Lab I

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Credits 1
Prerequisites
[MATH 1111](#) or [MATH 1101](#) or [MATH 1103](#).
Corequisites
CHEM 1211

CHEM 1212 : Chemistry II

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 3
Prerequisites
CHEM 1211
CHEM 1211L
Corequisites
CHEM 1212L

CHEM 1212L : Chemistry Lab II

Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

Credits 1

Prerequisites

CHEM 1211

CHEM 1211L

Corequisites

CHEM 1212

COLL - College Success

College Success Course Descriptions

COLL 1010 : College and Career Success Skills

This course is designed to assist the learner to acquire skills necessary to achieve academic, personal, and professional success and to improve student retention. Areas of importance include Getting off to a Good Start, Learning and Personality Styles, Time and Personal Financial Management, Stress Management and Wellness, Studying and Test Taking Skills, Communication Skills, Career Planning and Goal Setting, Computer Applications/Technology Skills and Employability/Professional Skills.

Credits 3

COLL 1050 : College & Career Exploration

Credits 2

COMP 1000 or COLL 1010 : Intro to Computers Or College Success & Survival Skills**COMP 1000**

This course introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include introductions to computer and digital terminology and usage, operating systems, Internet and digital communication, word processing applications, spreadsheet applications, database applications, and presentation applications.

COLL 1010

This course is designed to provide tools to assist students to acquire skills necessary to achieve academic and professional success in their chosen occupational/technical program of study. Topics include: Getting off to a Good Start, Learning and Personality Styles, Time and Money Management, Study and Test Taking Skills, Stress Management and Wellness, Communication Skills, and Career Exploration. Institutional Credit

Credits 2

CTDL - Commercial Truck Driving

Commercial Truck Driving CT61**Type**

Technical Certificate of Credit

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operation. The program is based

on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. The CTD program prepares students for the Georgia CDL Skills Exam.

Licensure Information

Graduates of the Commercial Truck Driving program are eligible for licensure testing by the Georgia Department of Driver Services.

Required Courses — 9 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1021	Combination Vehicle Basic Operation & Range Work	3
CTDL 1031	Combination Vehicle Advanced Operations	3
Minimum Credit Hours for Graduation		9

Commercial Truck Driving Course Descriptions

CTDL 1010 : Fundamentals of Commercial Driving

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

Credits 3

CTDL 1021 : Combination Vehicle Basic Operation & Range Work

This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must demonstrate proficiency in performing range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

Credits 3

Corequisites

CTDL 1010

CTDL 1030 : Combination Vehicle Advanced Operations

Advanced Operations develops students* driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a trailer safely on public roads through a variety of maneuvers.

Credits 4

Corequisites

CTDL 1021

CTDL 1031 : Combination Vehicle Advanced Operations

Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must demonstrate proficiency in required behind-the-wheel (BTW) skills such as operating a commercial vehicle safely on public roads through a variety of maneuvers.

Credits 3

Corequisites

CTDL 1021

CTDL 1040 : Commercial Driving Internship

Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students* driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

Credits 4

Corequisites

CTDL 1021

COMM - Communication

Communication Course Descriptions

COMM 1109 : Human Communication

Introduction to the fundamental components of the human communication process. The course provides a basic history of the communication discipline from ancient rhetorical roots through modern social sciences. The course emphasizes selected methods and practices in dyadic, small group, and oral presentational settings. Course content also covers communication models, as well as a survey of a variety of human communication modes and methods, including verbal, nonverbal, small group, interpersonal, mass, organizational, public, and intercultural communication. Credits 3

COFC - Construction

Basic Electrical Technician BE11

Type

Technical Certificate of Credit

The Basic Electrical Technician Technical Certificate of Credit provides fundamental instruction in electrical construction principles and practices. Topics include safety, mathematical applications, reading and interpreting blueprints, and direct and alternating current circuits.

Required Courses — 7 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
ELTR 1060	Electrical Prints, Schematics & Symbols	2

Select one of the DC following courses — 3 Hours

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

Select one of the AC following courses: — 3 Hours

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
	Minimum Credit Hours for Graduation	13

Certified Construction Worker CCW1

Type

Technical Certificate of Credit

The Certified Construction Worker certificate program offers training in the construction industry providing students with

the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

*** Select Option 1 or Option 2**

Required Courses — 3 Hours

Item #	Name	Credits
COFC 1050	Construction Print Reading Fundamentals	3

Option 1 — 6 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
	Occupational Related Elective (2 hrs)	2

Option 2 — 6 Hours

Item #	Name	Credits
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1020	Professional Tool Use and Safety	3
	Minimum Credit Hours for Graduation	9

NCCER Carpentry Fundamentals, CF21

Type

Technical Certificate of Credit

The Carpentry Fundamentals certificate introduces the student to the basic levels of carpentry skills. Topics include introduction to the trade, safety, hand and power tool usage, site layout, structural framing, building envelope systems, and exterior finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates receive a carpentry fundamentals certificate and have the qualifications of an entry-level framing carpenter.

Required Courses — 13 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4
CARP 1000	Fundamental Carpentry Skills	3
CARP 1015	Structural Framing I	3
CARP 1020	Structural Framing II	3
	Minimum Credit Hours for Graduation	13

NCCER Intermediate Electrical Systems Technician IE61

Type
Technical Certificate of Credit

— 12 Hours

The Intermediate Electrical Systems Technician Certificate is a continuation of the skills needed to be successful as an Electrical Systems Technician. Topics include terminations and splices, circuit breakers and fuses, control systems, load calculations, conductors, lighting

applications, hazardous locations, over-current protection, distribution equipment, transformers, commercial electrical services, motor calculations, and voice, data and video.

Item #	Name	Credits
ELTR 1025	Intermediate Electrical Concepts II	4
ELTR 1035	Advanced Electrical Concepts I	4
ELTR 1055	Advanced Electrical Concepts II	4
	Minimum Credit Hours for Graduation	12

NCCER Plumber's Assistant BP11

Type
Technical Certificate of Credit

— 12 Hours

Plumbers install, maintain, and repair many different types of plumbing systems. Some of these systems move water from reservoirs to municipal treatment plants and then to residential, commercial, and public buildings. Other systems dispose of waste, supply gas to stoves and furnaces, or provide for heating and cooling needs. Plumbers work in commercial and residential settings where water and septic systems need to be installed and maintained. Plumbers often work more than 40 hours per week and can be on call for emergencies nights and weekends.

Item #	Name	Credits

COFC 1080	Construction Trades Core	4
PLBG 1005	Plumbing Fundamentals I	4
PLBG 1015	Plumbing Fundamentals II	4
	Minimum Credit Hours for Graduation	12

Construction Course Descriptions

CARP 1020 : Structural Framing II

Structural Framing II completes the "rough-in" phase of building a structure. This course includes ceiling and roof framing as well as building envelope systems.

Credits 3

Prerequisites

CARP 1000

COFC 1080

COFC 1010 : Introduction to Construction

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes in life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards,, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

Credits 2

Prerequisites

None.

Corequisites

None

COFC 1011 : Overview of Building Construction Practices and Materials

This course covers the introduction to a residential construction project from start to finish. Topics to include preparing to build, tools and equipment, building foundations, wood frame construction, completing the structure, finish carpentry, construction specialties, and materials and fasteners used in the construction industry
Credits 3

COFC 1020 : Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup
Credits 3

COFC 1050 : Construction Print Reading Fundamentals

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules
Credits 3

COFC 1080 : Construction Trades Core

This course introduces the student to the basic fundamentals of the construction trades. Topics include Basic Safety, Construction Math, Hand and Power Tools, Construction Drawings, Rigging, Materials Handling, and Job-Site Communication and Work Ethic Skills
Credits 4

ELTR 1025 : Intermediate Electrical Concepts II

This course continues to introduce those specific job skills needed for a typical electrician. Topics in this course include pull and junction boxes, conductor installations, terminations and splices, circuit breakers and fuses, and control systems fundamentals.
Credits 4

ELTR 1035 : Advanced Electrical Concepts I

This course introduces the student to more advanced electrical applications. Topics include load calculations, conductor selection and calculations, practical lighting applications, hazardous locations, and overcurrent protection.
Credits 4

ELTR 1055 : Advanced Electrical Concepts II

This is the capstone course for the Electrical Systems Construction and Maintenance program. Topics include distribution equipment, transformers, commercial electrical services, motor calculations, motor controls, and voice, data and video.
Credits 4

PLBG 1005 : Plumbing Fundamentals I

This course introduces the student to the basic elements of the plumbing trade. Topics include introduction to the trade, plumbing safety, tools of the trade, plumbing math, and plumbing drawings.
Credits 4
Corequisites
COFC 1080

PLBG 1015 : Plumbing Fundamentals II

This course continues the introduction of basic plumbing concepts and practices. Topics include plastic pipe, copper tube, cast-iron and steel pipe and fittings, plumbing fixtures, DWV systems, and water distribution systems.
Credits 4
Corequisites
COFC 1080

COSM - Cosmetology

Cosmetology CO12 (No longer accepting new students effective Fall 24)

Type
Diploma

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/ intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are

employable as a cosmetology salesperson, cosmetologist, salon manager, or salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 47 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3

COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3
COSM 1100	Hair Services Practicum II	3
COSM 1110	Hair Services Practicum III	3
COSM 1115	Hair Services Practicum IV	2
COSM 1120	Salon Management	3
COSM 1125	Skin & Nail Care Practicum	2
Minimum Credit Hours for Graduation		55

Cosmetology for Licensure CGL1

Type

Technical Certificate of Credit

The Master Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, employability skills, and work

ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates will receive a cosmetology for Licensure and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

Program Approval

The Georgia Board of Cosmetology approves the Cosmetology program.

Licensure Information

Graduates of the Cosmetology program must meet the required educational and training requirements before they are eligible to apply to sit for the PSI practical and written examinations to obtain their licensure as a Master Cosmetologist or a Licensed Hair Designer.

Occupational Courses — 44 Hours

Item #	Name	Credits
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	3
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care & Advanced Techniques	3
COSM 1080	Physical Hair Services Practicum	3
COSM 1090	Hair Services Practicum I	3

COSM	Hair Services	3
1100	Practicum II	
COSM	Hair Services	3
1110	Practicum III	
COSM	Hair Services	2
1115	Practicum IV	
COSM	Salon	3
1120	Management	
COSM	Skin & Nail Care	2
1125	Practicum	
	Minimum Credit	44
	Hours for Graduation	

Hair Designer HD21

Type

Technical Certificate of Credit

The Hair Designer Technical Certificate of Credit is a sequence of courses that prepares students for careers in the field of hair design. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, hair and scalp diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, hair coloring, hair lightening, reception, sales, management, and work ethics. The curriculum meets the state licensing requirements of the State Board of Cosmetology.

High School Diploma or GED

Required:

For Admission: No

For Graduation: Yes

Required Courses — 36 Hours

Item #	Name	Credits

COSM	Introduction to	4
1000	Cosmetology Theory	
COSM	Chemical Texture	3
1010	Services	
COSM	Hair Care and	3
1020	Treatment	
COSM	Haircutting	3
1030		
COSM	Styling	3
1040		
COSM	Hair Color	3
1050		
COSM	Physical Hair	3
1080	Services Practicum	
COSM	Hair Services	3
1090	Practicum I	
COSM	Hair Services	3
1100	Practicum II	
COSM	Hair Services	3
1110	Practicum III	
COSM	Hair Services	2
1115	Practicum IV	
COSM	Salon	3
1120	Management	
	Minimum Credit	36
	Hours for Graduation	

Salon and Spa Support Specialist ST11

Type

Technical Certificate of Credit

The Salon and Spa Support Specialist Technical Certificate of Credit introduces courses that prepare students for careers in the field of Cosmetology as Shampoo Technicians. Learning opportunities develop the academic and professional knowledge required for job acquisition, retention, and advancement. The program emphasizes specialized training for safety, sanitation, state laws, rules and regulations, chemistry, anatomy and physiology, the structure of the hair, diseases, and disorders of the hair and scalp, hair and scalp analysis, basic hair and scalp treatments, basic shampooing techniques,

reception sales, management, employability skills, and work ethics. Graduates receive a Salon and Spa Support Specialist Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Required Courses — 10 Hours

Item #	Name	Credits
COSM	Introduction to	4
1000	Cosmetology Theory	
COSM	Hair Care and	3
1020	Treatment	
COSM	Salon	3
1120	Management	

Choose One of the Following: — 2 Hours

Item #	Name	Credits
EMPL	Interpersonal	2
1000	Relations & Professional Development	
	Elective (3 credits +)	3
	Minimum Credit	12
	Hours for Graduation	

Cosmetology

Course

Descriptions

COSM 1000 : Introduction to Cosmetology Theory

Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

Credits 4

COSM 1010 : Chemical Texture Services

Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

Credits 3

Corequisites
COSM 1000

COSM 1020 : Hair Care and Treatment

Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

Credits 3

Corequisites
COSM 1000

COSM 1030 : Haircutting

Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

Credits 3

Corequisites
COSM 1000

COSM 1040 : Styling

Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, comb-outs, and safety precautions.

Credits 3

Corequisites
COSM 1000

COSM 1050 : Hair Color

Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

Credits 3

Corequisites
COSM 1000

COSM 1060 : Fundamentals of Skin Care

This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

Credits 3

Corequisites
COSM 1000
COSM 1070

COSM 1070 : Nail Care & Advanced Techniques

Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

Credits 3

Corequisites

COSM 1000

COSM 1080 : Physical Hair Services Practicum

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure.

Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1000

COSM 1020

COSM 1030

COSM 1040

COSM 1090 : Hair Services Practicum I

Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure.

Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

Credits 3

Corequisites

COSM 1000

COSM 1010

COSM 1020

COSM 1030

COSM 1040

COSM 1050

COSM 1100 : Hair Services Practicum II

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 3

Corequisites

COSM 1090

COSM 1110 : Hair Services Practicum III

Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 3

Corequisites

COSM 1100

**COSM 1115 : Hair Services
Practicum IV**

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and lightening; hair and scalp treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

Credits 2**Corequisites****COSM 1110****COSM 1120 : Salon Management**

Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

Credits 3**Corequisites****COSM 1000****COSM 1125 : Skin & Nail Care
Practicum**

This course provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: skin treatment; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

Credits 2**Corequisites****COSM 1060****COSM 1070**

CRJU - Criminal Justice

**AS Criminal Justice,
AF63****Type**

Associate of Science, AS

The Criminal Justice associate of science degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice associate of science degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level

persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice associate of science degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts Communication — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social Behavioral Science — 3 Hours

Item #	Name	Credits
POLS 1101	American Government	3

Social Sciences A — 3 Hours

Item #	Name	Credits
	HIST 2111 or HIST 2112	3

Social Sciences B — 6 Hours

Select courses below to total 6 hrs

Item #	Name	Credits

ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences Mathematics — 6 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3

Math Courses — 3 Hours

Select one course

Item #	Name	Credits
MATH 1113	Precalculus	3
MATH 1131	Calculus I	4

Natural Science Electives — 8 Hours

Select course sequence below to total 8 hrs

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1

CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities Fine Arts — 3 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3

Humanities Fine Arts Electives — 3 Hours

Select one course

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
MUSC 1101	Music Appreciation	3
SPCH 1101	Public Speaking	3

Specific Program Requirements — 3 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

Program Specific Elective — 3 Hours

Select one course

Item #	Name	Credits
SPCH 1101	Public Speaking	3
SOCI 1101	Introduction to Sociology	3

Occupational Courses — 3 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3

Occupational Course Electives — 15 Hours

Select courses below to total 15 hours

Item #	Name	Credits
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2050	Criminal Procedure	3
CRJU 2060	Criminology	3
CRJU 2070	Juvenile Justice	3
Minimum Credit Hours for Graduation		65

Criminal Justice Technology CJT3

Type
Associate of Applied Science, AAS

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Area I - Language Arts/ Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences (3 hrs) — 3 Hours

Choose one Social/Behavioral Science Course

Item #	Name	Credits
ECON 1101	Principles of Economics	3

ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

Select one additional course from Area I, II, III, or IV

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
	CRJU 2090 or CRJU 2100	3

Occupational Electives — 15 Hours

Item #	Name	Credits
CRJU 1021	Private Security	3
CRJU 1043	Probation and Parole	3
CRJU 1050	Police Patrol Operations	3

CRJU 1052	Criminal Justice Admin.	3
CRJU 1056	Police Traffic Control & Investigation	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1072	Introduction to Forensic Science	3
CRJU 1075	Report Writing	3
CRJU 1074	Application in Introductory Forensics	3
CRJU 2060	Criminology	3
CRJU 2110	Homeland Security	3
CRJU 2201	Criminal Courts	3
Minimum Credit Hours for Graduation		60

Criminal Justice Technology CJT2

Type
Diploma

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in

the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 30 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1400	Ethic & Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
CRJU 2070	Juvenile Justice	3
CRJU 2090 or CRJU 2100		3

Occupational Electives — 9 Hours

Item #	Name	Credits
CRJU Occupational Electives (9 hrs)		
Minimum Credit Hours for Graduation		48

Crime Scene Fundamentals CZ31

Type
Technical Certificate of Credit

The Crime Scene Fundamentals Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain various introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1063	Crime Scene Processing	3
Minimum Credit Hours for Graduation		12

Criminal Justice Specialist CJ21

Type

Technical Certificate of Credit

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 15 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law	3
	Minimum Credit Hours for Graduation	15

Introduction to Criminal Justice IT51

Type

Technical Certificate of Credit

The Introduction to Criminal Justice Technical Certificate of Credit is a sequence of courses that introduces students to studies which may lead to criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Introduction to Criminal Justice Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

Required Courses — 12 Hours

Item #	Name	Credits
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 2050	Criminal Procedure	3
	Minimum Credit Hours for Graduation	12

Criminal Justice Course Descriptions

CRJU 1010 : Introduction to Criminal Justice

Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

Credits 3

CRJU 1021 : Private Security

Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together.

Credits 3

CRJU 1030 : Corrections

Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

Credits 3

CRJU 1040 : Principles of Law Enforcement

This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

Credits 3

CRJU 1043 : Probation and Parole

This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

Credits 3

CRJU 1050 : Police Patrol Operations

This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills

Credits 3

CRJU 1052 : Criminal Justice Admin.

This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1056 : Police Traffic Control & Investigation

This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

Credits 3

CRJU 1062 : Methods of Criminal Investigation

This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1063 : Crime Scene Processing

This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

Credits 3

Corequisites

CRJU 1010

Or [CRJU 2050](#)

CRJU 1065 : Community-Oriented Policing

Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

Credits 3

CRJU 1068 : Criminal Law for Criminal Justice

This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16: Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40: Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 1072 : Introduction to Forensic Science

The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

Credits 3

CRJU 1074 : Application in Introductory Forensics

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

Credits 3

CRJU 1075 : Report Writing

Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 1400 : Ethic & Cultural Perspectives for Criminal Justice

This course provides an exploration ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

Corequisites

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2020 : Constitutional Law

This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

Credits 3

CRJU 2050 : Criminal Procedure

Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

Credits 3

CRJU 2060 : Criminology

Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

Credits 3

Prerequisites

CRJU 1010

ENGL 1010

CRJU 2070 : Juvenile Justice

Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

Credits 3

CRJU 2090 : Criminal Justice Practicum

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2100 : Criminal Justice Externship

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

Credits 3

CRJU 2110 : Homeland Security

The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

Credits 3

Prerequisites

CRJU 1010

Or [CRJU 2050: Criminal Procedure](#)

CRJU 2201 : Criminal Courts

This course examines the historical context on the development, functions, and controversies in the courts system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post-conviction process.

Credits 3

CUUL - Culinary Arts

Prep Cook PC51**Type**

Technical Certificate of Credit

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: Food services, history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking.

*** High School Admissions Only**

Required Courses — 12 Hours

Item #	Name	Credits
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	2
CUUL 1120	Principles of Cooking	6
Minimum Credit Hours for Graduation		12

Culinary Arts Course Descriptions

CUUL 1000 : Fundamentals of Culinary Arts

Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit d corp. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

Credits 4

CUUL 1110 : Culinary Safety and Sanitation

Emphasizes fundamental kitchen and dining room safety, sanitation, maintenance, and operation procedures. Topics include: cleaning standards, O.S.H.A. M.S.D.S. guidelines, sanitary procedures following SERV-SAFE guidelines, HACCAP, safety practices, basic kitchen first aid, operation of equipment, cleaning and maintenance of equipment, dishwashing, and pot and pan cleaning. Laboratory practice parallels class work.

Credits 2

CUUL 1120 : Principles of Cooking

This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

Credits 6

Prerequisites

CUUL 1110

Cyber & Related

Computer Support Specialist CS23

Type

Associate of Applied Science, AAS

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing.

Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.

The CIS program is a member of the Microsoft IT Academy.

Area I - Language Arts/ Communication — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3

MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Core Elective — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 33 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4
	CIST Electives (12 credits)	12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective Course — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Guided Office Productivity Application Course — 3 Hours

Choose one of the following:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4
CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
	Minimum Credit Hours for Graduation	62

Cybersecurity CY13

Type

Associate of Applied Science, AAS

The Cybersecurity degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Cybersecurity Specialists or Information Security Analysts.

Area I - Language Arts/ Communications (3 hrs) — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences (3 hrs) — 3 Hours

* Select at least one of the following:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3

MATH 1111	College Algebra	3

Area IV - Humanities/ Fine Arts (3 hrs) — 3 Hours

* Select one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Electives (3 hrs) — 3 Hours

Choose one additional course from Area I, II, III, or IV from the complete listing of General Education courses and electives: [General Education Courses](#)

Occupational Courses — 41 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
COMP 1000	Introduction to Computer Literacy	3

CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
	Guided Electives (4 credits)	4

Introductory-Level Networking Class (4 hrs) — 4 Hours

* Choose either of the following courses:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	60

Networking Specialist NS13

Type

Associate of Applied Science, AAS

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in

the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy.
The CIS program is a member of the Microsoft IT Academy.

* Students: Choose between either a Microsoft Specialization 8M13 or a Cisco Specialization 8C23

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 14 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3

Operating System Elective — 21 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1130	Operating Systems Concepts	3
CIST 1135	Operating Systems & Virtual/Cloud Computing	4

Guided Electives — 14 Hours

Item #	Name	Credits
	Guided Electives (14 credits)	14

Introductory Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M13 — 16 Hours

Choose one of the following Specializations:

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4

CIST 2414 or CIST 2420 4

Cisco Exploration Specialization 8C23 — 16 Hours

Item #	Name	Credits
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
	Guided Electives (4 credits)	4

Cloud Computing — 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4
	Minimum Credit Hours for Graduation	66

Computer Support Specialist CS14

Type
Diploma

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing.

Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialist.

Program Approval

The CIS program is a Certified CISCO Network Academy.
The CIS program is a member of the Microsoft IT Academy.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1305	Program Design and Development	3
CIST 2130	Desktop Support Concepts	4

CIST Electives (12 credits) 12

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory Networking — 4 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

CIST Database Elective — 4 Hours

Item #	Name	Credits
CIST 2129	Comprehensive Database Techniques	4

CIST Office Productivity Course — 3 Hours

* Choose one of the following classes:

Item #	Name	Credits
CIST 2120	Supporting Application Software	4

CIST 2126	Comprehensive Presentation & Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
	Minimum Credit Hours for Graduation	55-56

Cybersecurity CY12

Type
Diploma

The Cybersecurity diploma program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the basic skills areas of English and mathematics, as well as in the technical areas of computer terminology and concepts, computer networking, and network security. Program graduates are qualified for employment as Computer Network Security Specialists, Cybersecurity Specialists or Information Security Analysts.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 34 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
	CIS Networking Electives (8 hrs)	8

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

— Hours

Minimum Credit Hours for Graduation	46

Networking Specialist NS14

Type
Diploma

The Computer Information Systems - Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing.

Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Program Approval

The CIS program is a Certified CISCO Network Academy. The CIS program is a member of the Microsoft IT Academy.

*Choose either the Microsoft or the Cisco Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 23 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
	CIST Electives (9 credits)	9

Introductory-Level Networking Class — 4 Hours

* Choose one of the following

* CIST 2451: Only if not used as a Cisco Specialization course

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4

Microsoft Specialization 8M42 — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4

Cisco Exploration Specialization 8C12 — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO
	4

CIST 2452	CISCO Switching, Routing, & Wiring Essentials	4
CIST 2453	Enterprise Networking, Security, and Automation	4
Guided 4		
Elective		

Operating System Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4
	Minimum Credit Hours for Graduation	54-55

AWS Cloud Solutions Specialist AA91

Type
Technical Certificate of Credit

Students acquire Cloud computing skills in the Amazon Web Services Environment through hands-on practical experience and can prepare for AWS Certifications including Cloud Practitioner, Solutions Architect Associate, and Developer Associate.

— 16 Hours

Item #	Name	Credits
CIST 2480	AWS Cloud Foundations	4
CIST 2481	AWS Cloud Architecting	4
CIST 2482	AWS Cloud Developing	4
	Guided Electives (4 credits)	4

Minimum Credit Hours for Graduation 16

Cisco Network Specialist CN71

Type
Technical Certificate of Credit

The Cisco Network Specialist program teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses — 16 Hours

Item #	Credits
CIST 2451	Introduction to Networks - CISCO 4
CIST 2452	CISCO Switching, Routing, & Wiring Essentials 4
CIST 2453	Enterprise Networking, Security, and Automation 4
Guided 4	
Elective	
	Minimum Credit Hours for Graduation 16

CompTIA A+ Certified Preparation CA61

Type
Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the basic entry-level skills working toward CompTIA A+ certification.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation & Maintenance	4
	CIST 1130 or CIST 1135	3-4
	Minimum Credit Hours for Graduation	10

CompTIA A+ Certified Technician Preparation CA71

Type
Technical Certificate of Credit

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses — 18 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4

CIST 1130 or CIST 1135	3-4
Guided Electives (4 credits)	4
Minimum Credit Hours for Graduation	18

Cyber Crime Specialist CCR1

Type

Technical Certificate of Credit

This is a complementary certificate for the Information Security and Criminal Justice students. This certificate program will provide basic training in Computer Forensics and Cyber Crime.

— 21 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 2612	Computer Forensics	4
	Minimum Credit Hours for Graduation	21

Cybersecurity Fundamentals CW71

Type

Technical Certificate of Credit

The Cybersecurity Fundamentals TCC is a sequence of courses designed, upon completion of

required prerequisite courses, to provide students with an understanding of the fundamental concepts, principles, and techniques required in computer information processing. Completion of the TCC will prepare students to either continue more advanced studies in cybersecurity leading toward a Diploma or AAS Degree or broaden their current CIST knowledge base.

Required Courses — 14 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation & Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies & Procedures	3

Select one of the Following: — 4 Hours

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	18

Cybersecurity IS81

Type

Technical Certificate of Credit

The Information Security Specialist certificate is designed to give students the knowledge

they need to understand and maintain computer information systems security.

Required Courses — 26 Hours

Item #	Name	Credits
CIST 1601	Information Security Fundamentals	3
CIST 2601	Implementing Operating System Security	4
CIST 2611	Network Defense and Countermeasures	4
CIST 1602	Security Policies & Procedures	3
CIST 2602	Network Security	4
CIST 2612	Computer Forensics	4
CIST 2613	Ethical Hacking & Penetration Testing	4
	Minimum Credit Hours for Graduation	26

Foundation of Computer Programming FF41

Type

Technical Certificate of Credit

This program provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem-solving. This technical certificate is an embedded certificate within the existing computer programming diploma and associate degree programs.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
	CIST 2371 or CIST 2742	4

Introductory Networking — 4 Hours

Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	15

Help Desk Specialist HD41

Type

Technical Certificate of Credit

The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

Required Courses — 19 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4

CIST 1122	Hardware Installation & Maintenance	4
CIST 2130	Desktop Support Concepts	4
	Guided Electives (4 credits)	4

CIST Operating Systems Elective — 3-4 Hours

Choose one of the following:

Item #	Name	Credits
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits
CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	26-27

Microsoft Network Administrator MS11

Type

Technical Certificate of Credit

The Microsoft Network Administrator Certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking

Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses — 16 Hours

Item #	Name	Credits
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Installation & Maintenance	4
CIST 2413	Cloud and Data Foundations with MS Azure	4
	CIST 2414 or CIST 2420	4
	Minimum Credit Hours for Graduation	16

Microsoft Office Application Specialist MF51

Type

Technical Certificate of Credit

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses — 16 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 2126	Comprehensive Presentation & Email Techniques	3

CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
	Minimum Credit Hours for Graduation	16

Network Technician NT41

Type

Technical Certificate of Credit

The Network Technician technical certificate of credit provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to install, configure, and maintain networks using Windows networking software.

Required Courses — 10 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
	CIST 1130 or CIST 1135	3-4

Introductory-Level Networking Class — 4 Hours

* Choose one of the following:

Item #	Name	Credits

CIST 1401	Computer Networking Fundamentals	4
CIST 2451	Introduction to Networks - CISCO	4
	Minimum Credit Hours for Graduation	14

iOS App Development in Swift IAD1

Type

Technical Certificate of Credit

The iOS App Development in Swift Technical Certificate of Credit prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes the knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode.

Required Courses — 11 Hours

Item #	Name	Credits
CIST 1306	Programming Foundations - Swift	3
CIST 2301	Application Development in Swift I	4
CIST 2302	Application Development in Swift II	4
	Minimum Credit Hours for Graduation	11

Cyber & Related Course Descriptions

CIST 1001 : Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing

Credits 4

CIST 1121 : Microcomputer Troubleshooting

Emphasizes the use of system theory and diagnostic routines to isolate failures, replace the defective module or subsystem, and verify proper operations. Topics include: basic system theory, operating systems use, diagnostic programs, subsystem isolation, upgrading systems, preventive maintenance, and service reports preparation.

Credits 4

Prerequisites

CIST 1130

CIST 1122

CIST 1122 : Hardware Installation & Maintenance

This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination

Credits 4

CIST 1130 : Operating Systems Concepts

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI) This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking

Credits 3

CIST 1135 : Operating Systems & Virtual/Cloud Computing

This course provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI). Topics include using the modern virtual operating systems and cloud environments.

Credits 4

CIST 1141 : Network+ Preparation

To fundamentally prepare the student for the CompTIA Network+ certification examination. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining local and wide area networks. Topics include: an introduction to networking, networking standards and the OSI model, network protocols, transmission basics and networking media, physical and logical topologies, networking hardware, WANs and remote connectivity, network operating systems and Windows 2000-based networking, NetWare-based networking, networking with UNIX, networking with TCP/IP and the Internet, troubleshooting network problems, maintaining and upgrading a network, ensuring integrity and availability, network security and managing network design and implementation

Credits 4

CIST 1237 : Comprehensive Powerpoint

Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition

Credits 3

CIST 1239 : MS Office Specialist-Outlook

Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components

Credits 3

CIST 1305 : Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays

Credits 3

CIST 1306 : Programming Foundations - Swift

Learn key computing concepts, building a solid foundation in programming with Swift. Learn about the impact of computing and apps on society, economies, and cultures while exploring iOS app development, including the app design process: brainstorming, planning, prototyping, and evaluating an app design of their own.

Credits 3

CIST 1401 : Computer Networking Fundamentals

Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security
Credits 4

CIST 1510 : Web Development I

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps
Credits 3

CIST 1520 : Scripting Technologies

In CIST 1520 Scripting Technologies students learn how to use the features and structure of a client side scripting language. Students will also explore the features on server side scripting. Students will develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms
Credits 3

CIST 1530 : Web Graphics I

Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software
Credits 3

CIST 1540 : Web Animation I

In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting
Credits 3

CIST 1601 : Information Security Fundamentals

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security
Credits 3

CIST 1602 : Security Policies & Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy
Credits 3

CIST 2114 : Fundamentals of Wireless LANs

This introductory course to Wireless LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills in the following areas: Wireless LAN setup and troubleshooting; 802.11a, 802.11b, 802.11g, and 802.11n technologies, products and solutions; Site Surveys; Resilient WLAN design, installation and configuration; WLAN Security- 802.1x, EAP, LEAP, WEP, SSID, WPA, WPA2; and Vendor interoperability strategies
Credits 4
Prerequisites
[CIST 1401](#) or [CIST 2451](#)

CIST 2120 : Supporting Application Software

This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint
Credits 4

CIST 2122 : A+ Preparation

This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers
Credits 3

CIST 2126 : Comprehensive Presentation & Email Techniques

This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing
Credits 3

CIST 2127 : Comprehensive Word Processing Techniques

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented
Credits 3

CIST 2128 : Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data
Credits 3

CIST 2129 : Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases
Credits 4

CIST 2130 : Desktop Support Concepts

This course is designed to give an overview to Desktop Support Management
Credits 4

CIST 2301 : Application Development in Swift I

Build fundamental iOS app development skills with Swift. Master the core concepts and practices that professional programmers use daily and build a basic fluency in Xcode source and UI editors. Create iOS apps that adhere to standard practices, including the use of stock UI elements, layout techniques, and common navigation interfaces. Explore app design by brainstorming, planning, prototyping, and evaluating an application.
Credits 4
Prerequisites
CIST 1306

CIST 2302 : Application Development in Swift II

Expand on the knowledge and skills they developed in Develop in Swift Fundamentals by extending work in iOS app development, creating more complex and capable apps. Work with data from a server and explore new iOS APIs that allow for much richer app experiences including displaying large collections of data in multiple formats. Build an app in Xcode from the ground up with step-by-step instructions.

Credits 4

Prerequisites

CIST 2301

CIST 2311 : Visual Basic I

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsofts Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls

Credits 4

CIST 2341 : C# Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2361 : C++ Programming I

Provides opportunity to gain a working knowledge of "C++" programming. Includes creating, editing, executing, and debugging "C++" programs of moderate difficulty. Topics include: basic "C++" concepts, simple I/O and expressions, I/O and control statements, arrays, pointers, structures, managing data and developing programs.

Credits 4

Prerequisites

CIST 1305

CIST 1306

CIST 2371 : Java Programming I

This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

Credits 4

Prerequisites

CIST 1305

CIST 2411 : Microsoft Client

Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment

Credits 4

CIST 2412 : Microsoft Server Installation & Maintenance

Students will learn how to deploy Windows Server in a variety of different environments, including data center and cloud environments that rely on virtualization and containers. They will learn how to configure and manage server storage, troubleshoot performance issues, Active Directory, Certificate Services, DNS, DHCP, WSUS, IIS, file sharing, printing, and remote access.

Credits 4

CIST 2413 : Cloud and Data Foundations with MS Azure

This course prepares students with the foundational knowledge of cloud services using Microsoft Azure. Areas covered in the class include basic knowledge of cloud services, a knowledge of data concepts, using them on the Cloud, and how they're implemented using Microsoft Azure.

Credits 4

CIST 2414 : Maintaining Windows Servers

Provides students with knowledge and skills necessary to secure, manage, support and administer a Microsoft network infrastructure both locally and thru Azure. Prepares students to take the Microsoft AZ801 certification exam.

Credits 4

CIST 2420 : Ms Exchange Server

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

Credits 4

Prerequisites

[CIST 2413](#) and [CIST 2414](#)

CIST 2431 : Unix/Linux Introduction

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, and linking files, wildcards, determining present working directory and changing directory locations

Credits 4

CIST 2441 : Network Home & Small Business

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing

Credits 4

CIST 2442 : Working at Sm-Med Bus or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

Credits 4

Prerequisites

CIS 2321

CIST 2443 : CISCO Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Credits 4

Prerequisites

[CIST 2441](#)

CIST 2444 : Designing & Supporting Computer Networks

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role laying exercises that students complete while developing their network upgrade proposals.

Credits 4**Prerequisites**

CIST 2442

CIST 2443

CIST 2451 : Introduction to Networks - CISCO

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration

Credits 4**CIST 2452 : CISCO Switching, Routing, & Wiring Essentials**

The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

Credits 4**Prerequisites**

CIST 2451

CIST 2453 : Enterprise Networking, Security, and Automation

The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

Credits 4**Prerequisites**

CIST 2451

CIST 2452

CIST 2455 : CISCO CCNA Security

Cisco Networking Academy CCNA Security course provides a next step to build upon the concepts and skills acquired in the four Cisco Networking Academy CCNA courses. It is for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. It covers network security principles, tools, and configuration practices to enhance network security. Students will acquire the skills needed to design, implement, and support network security

Credits 4**CIST 2480 : AWS Cloud Foundations**

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Credits 4

CIST 2481 : AWS Cloud Architecting

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

Credits 4

Prerequisites

CIST 2480

CIST 2482 : AWS Cloud Developing

AWS Cloud Developing is designed to help students gain technical expertise in development using cloud technologies and prepare them to take the AWS Certified Developer Associate level AWS Certification exam.

Credits 4

Prerequisites

CIST 2480

CIST 2510 : Web Technologies

In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity

Credits 3

CIST 2550 : Web Development II (DBASE Connect)

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation

Credits 3

CIST 2601 : Implementing Operating System Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment

Credits 4

Prerequisites

CIST 1601

CIST 1401

CIST 2602 : Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements.

Credits 4

Prerequisites

CIST 1601

And [CIST 1401](#), or [CIST 2441](#), or [CIST 2451](#)

CIST 2611 : Network Defense and Countermeasures

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall, and detecting and preventing network intrusions.

Credits 4

Prerequisites

CIST 1601

CIST 1401

Instead of CIST 1601, students can take CIST 2441 or CIST 2451.

CIST 2612 : Computer Forensics

This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

Credits 4

Prerequisites

CIST 1122

CIST 1601

CIST 2613 : Ethical Hacking & Penetration Testing

This course teaches students the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to ethical hacking, and penetration testing. It is for individuals who want to enhance their information security skill set and help meet the growing demand for security professionals. Topics include network and computer attacks, footprinting and social engineering, port scanning, enumeration, OS vulnerabilities, hacking web servers, hacking wireless networks, cryptography and network protection systems.

Credits 4

Prerequisites

CIST 1601

CIST 2742 : Beginning Python Programming

Provides a study of the Python programming language to solve applications. Topics include: basic coding rules, input/output operations, arithmetic operations, debugging techniques, lists and arrays, sorting, editing input, basic search techniques, game simulations, game design, and object-oriented programming (OOP)

Credits 4

CIST 2921 : It Analysis Design & Project Management

IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management

Credits 4

CIST 2991 : Cist Internship I (Capstone)

Provides the instructor and student a 3 credit hour opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours)

Credits 3

Guided Elective

Credits 4

DIET - Diesel Technology

Diesel Equipment Technology DET4

Type

Diploma

The Diesel Equipment Technology diploma program is a sequence of courses designed to prepare students for careers in the diesel equipment service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of truck, heavy equipment, marine systems, or emergency power generator repair theory and practical application necessary for successful employment depending on the specialization area a student chooses to complete. Program graduates receive a Diesel Equipment Technology diploma that qualifies them as entry-level Diesel Equipment technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 27 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 1030	Diesel Engines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3

Heavy Equipment Specialization — 12 Hours

Item #	Name	Credits
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
	Minimum Credit Hours for Graduation	47

Basic Heavy Equipment Operator BHE1

Type

Technical Certificate of Credit

The Basic Heavy Equipment Operator Technical Certificate of Credit program provides the skills necessary for program completers to obtain entry-level employment in the area of equipment operations. Topics include: safety, equipment care and maintenance, heavy equipment use in construction and infrastructure, basic earth moving, and grading.

Required Courses — 9 Hours

Item #	Name	Credits
EQOP 1000	Introduction to Heavy Equipment Safety	3
EQOP 1001	Introduction to Heavy Equipment	3
EQOP 1002	Heavy Equipment Operation Basics	3
	Minimum Credit Hours for Graduation	9

Diesel Electrical & Electronic Systems Technician DE11

Type

Technical Certificate of Credit

The Diesel Electrical and Electronic Systems Technician certificate program provides the student with training for becoming an entry level diesel electrical/electronics systems technician. The topics presented include diesel shop safety and tool use, basic electrical and electronics theory, starting and charging systems, and electronic controls and accessory systems.

Required Courses — 10 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
	Minimum Credit Hours for Graduation	10

Diesel Engine Service Technician DE21

Type

Technical Certificate of Credit

The Diesel Engine Service Technician certificate program provides the student with training to become an entry level diesel engine service technician. The topics covered include diesel shop safety, tools and equipment, diesel electrical/electronic systems, and diesel engines and support systems.

Required Courses — 16 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1030	Diesel Engines	6
	Minimum Credit Hours for Graduation	16

Diesel Truck Maintenance Technician DTM1

Type

Technical Certificate of Credit

The Diesel Truck Maintenance Technician certificate program provides training in the essential knowledge, skills, and attitudes necessary for employment as a maintenance technician on semi-trucks, trailers or other diesel equipment. The topics covered include diesel shop safety, tools and equipment, preventive maintenance procedures, truck brake systems, and truck drive trains.

Required Courses — 23 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/Electronics	7
DIET 1020	Preventive Maintenance	5
DIET 2010	Truck Brakes	4
DIET 2020	Truck Drive Trains	4
	Minimum Credit Hours for Graduation	23

Heavy Diesel Service Technician HD31

Type

Technical Certificate of Credit

The Heavy Diesel Service Technician certificate program provides training in both theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines and fuel systems, electrical and electronic systems, off road power trains, and heavy equipment hydraulics. Successful completion of this program will

prepare the student for entering industry as an entry level diesel service technician.

Required Courses — 31 Hours

Item #	Name	Credits
DIET 1000	Introduction to Diesel Technology	3
DIET 1010	Diesel Electrical/ Electronics	7
DIET 1030	Diesel Engines	6
DIET 2001	Heavy Equipment Hydraulics	6
DIET 2011	Off Road Drivelines	6
DIET 1040	Diesel Truck & Heavy Equipment HVAC	3
	Minimum Credit Hours for Graduation	31

Diesel Technology Course Descriptions

DIET 1000 : Introduction to Diesel Technology

This course introduces basic knowledge and skills the student must have to succeed in the Diesel Equipment Technology field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools and equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, welding safety, and basic welding skills. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

Credits 3

DIET 1010 : Diesel Electrical/ Electronics

This course introduces students to electrical and electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include: general electrical system diagnosis, battery diagnosis and repair, starting system diagnosis and repair, charging system diagnosis and repair, lighting system diagnosis and repair, gauges and warning devices, and an introduction and familiarization with electrical and electronic systems.

Credits 7

Prerequisites

DIET 1000

DIET 1020 : Preventive Maintenance

This course introduces preventive maintenance procedures pertaining to medium/heavy duty trucks and heavy equipment. Topics include: engine systems; cab and hood; heating, ventilation and air conditioning (HVAC); electrical and electronics; frame and chassis.

Credits 5

Prerequisites

DIET 1010

DIET 1030 : Diesel Engines

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, hydraulic pumps, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

Credits 6

Prerequisites

DIET 1010

DIET 1040 : Diesel Truck & Heavy Equipment HVAC

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures.

Credits 3

Prerequisites

DIET 1010

DIET 1050 : Diesel Engine Tech Internship

This internship provides the student work experience in the occupational environment. Topics include: application of prerequisite knowledge and skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The student's internship experience may be implemented through the use of written individualized training plans, written performance evaluations, and required integrative experiences at the internship site.

Credits 4

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2001 : Heavy Equipment Hydraulics

This course introduces the student to basic hydraulic fundamentals, components, system servicing, symbols and schematics. The student will learn component operation and service techniques for maintaining a hydraulic system. The student will also learn to identify the ISO symbols used on hydraulic schematics and to trace the hydraulic schematics. Topics include: general system operation; basic hydraulic principles; hydraulic system components; hydraulic control valves; load sensing pressure control systems; pilot operated hydraulic system operation; and hydraulic actuators.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 1030

DIET 2010 : Truck Brakes

This course introduces air and hydraulic brake systems used on medium/heavy duty trucks. Classroom theory on brake systems along Federal Motor Vehicle Safety Standards (FMVSS) is strongly emphasized. Topics include: introduction to hydraulic systems and safety; air brakes air supply and system service; air brakes mechanical service; parking brakes; hydraulic brake system and service; hydraulic brakes mechanical service; hydraulic brakes power assist units; anti-lock brake systems (ABS) and automatic traction control (ATC); and wheel bearings.

Credits 4

DIET 2011 : Off Road Drivelines

This course introduces power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

Credits 6

Prerequisites

DIET 1000

DIET 1010

DIET 2020 : Truck Drive Trains

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

Credits 4

Corequisites

DIET 1000

DIET 1010

EQOP 1000 : Introduction to Heavy Equipment Safety

Introduces the fundamentals of heavy equipment and utility tractor safety. Topics include first aid, CPR, personal protective equipment, OSHA Regulations, and other related heavy equipment and utility tractor safety practices.

Credits 3

EQOP 1001 : Introduction to Heavy Equipment

Introduces the fundamentals of heavy equipment operations. Topics include: history of heavy equipment in construction and infrastructure, heavy equipment terminology, operator responsibilities, career opportunities, equipment safety, preparation of graded surfaces, and basic earth moving.

Credits 3

EQOP 1002 : Heavy Equipment Operation Basics

Introduces the fundamentals of earthmoving including operation of heavy equipment and utility tractors. Topics include: blueprint reading, grading, grade calculations, operations and maintenance of heavy equipment and utility tractors.

Credits 3

DRFT - Drafting

Drafting Technology**DT13 (NO Longer****Accepting Students)****Type**

Associate of Applied Science, AAS

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

* Students must select and complete one of the following specializations:

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1111	College Algebra	3

Area IV - Humanities/Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Area V - Additional Program Specific Requirements — 3 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3

Occupational Courses — 8 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

Mechanical Drafting 8M32 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Occupationally Related Electives	

Architectural Drafting Specialization 8AD2 — 37 Hours

* Minimum of 17 Occupational Elective Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4

Occupationally Related Electives

Civil Technology Specialization 8CT2 — 37 Hours

* Minimum of 8 Occupational
Elective Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	60

Drafting Technology DT12 (NO Longer Accepting Students)

Type
Diploma

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning

opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

* Students must complete one of the following specializations:

- Mechanical Drafting 8M32
- Architectural Drafting Specialization 8AD2
- Civil Technology Specialization 8CT2

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 11 Hours

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3

Occupational Math — 3 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1015	Practical Mathematics-Drafting	3
MATH 1015	Geometry and Trigonometry	3
MCHT 1013	Machine Tool Math	3

Mechanical Drafting 8M32 — 24 Hours

Item #	Name	Credits
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Section Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4
	Guided Elective - Drafting	4

Architectural Drafting Specialization 8AD2 — 24 Hours

Item #	Name	Credits
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
	Guided Elective - Drafting	4

Civil Technology Specialization 8CT2 — 29 Hours

Item #	Name	Credits
DRFT 2000	Public Works Infrastructure	3
DRFT 2005	Plan Reading	3
DRFT 2010	Construction Materials	4
DRFT 2020	Construction Materials and Cost Estimating	3
DRFT 2030	Project Management	3
DRFT 2040	Highway Design	3
DRFT 2050	Surveying I	2
DRFT 2060	Route Location and Design	5
DRFT 2070	Civil Tech Internship	3
	Minimum Credit Hours for Graduation	46

Drafter's Assistant DA31 Type

Technical Certificate of Credit

All of the courses included in the Drafter's Assistant TCC program are embedded in either the Drafting Technology diploma or Degree programs. The Drafter's Assistant TCC endows students with the prospect to begin on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Required Courses — 11 Hours

Item #	Name	Credits

DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	11

Drafting Course Descriptions

DFTG 1015 : Practical Mathematics-Drafting

This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

Credits 3

DFTG 1101 : CAD Fundamentals

Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

Credits 4

DFTG 1103 : Multiview/Basic Dimensioning

Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

Credits 4

DFTG 1105 : 3D Mechanical Modeling

In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

Credits 4

DFTG 1107 : Advanced Dimensioning/Section Views

Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

Credits 4

DFTG 1109 : Auxiliary Views/ Surface Development

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

Credits 4

DFTG 1111 : Fasteners

This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, and utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

Credits 4

DFTG 1113 : Assembly Drawings

Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

Credits 4

DFTG 1125 : Architectural Fundamentals

Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

Credits 4

DFTG 1127 : Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

Credits 4

DFTG 1129 : Residential Drawing I

Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduced to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1131 : Residential Drawing II

Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

Credits 4

DFTG 1133 : Commercial Drawing I

Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

Credits 4

DFTG 2010 : Engineering Graphics

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

Credits 4

DFTG 2020 : Visualization and Graphics

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

Credits 3

DRFT 2000 : Public Works Infrastructure

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

Credits 3

DRFT 2005 : Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specification.

Credits 3

DRFT 2010 : Construction Materials

This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

Credits 4

DRFT 2020 : Construction Materials and Cost Estimating

This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

Credits 3

DRFT 2030 : Project Management

This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

Credits 3

DRFT 2040 : Highway Design

This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

Credits 3

DRFT 2050 : Surveying I

Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

Credits 2

DRFT 2060 : Route Location and Design

Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems, ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

Credits 5

DRFT 2070 : Civil Tech Internship

Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

Credits 3

ECCE - Early Childhood Care Education

Early Childhood Care and Education EC13

Type

Associate of Applied Science, AAS

The Early Childhood Care and Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of five areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional/school age, or family child care.

Program Approval

The Early Childhood Care and Education program is approved by the Georgia Professional Standards Commission.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details. The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC). To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3
COMM 1109	Human Communication	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOC 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3

SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective (3 hrs) — 3 Hours

Item #	Name	Credits
	Specific General Education Core Elective (3 hrs)	3

Occupational Courses — 36 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2201	Exceptionalities	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship — 12 Hours

Item #	Name	Credits

ECCE 2245	Early Childhood Care and Education Internship I	6

ECCE 2246	Early Childhood Care and Education Internship II	6

Paraprofessional Specialization — 6 Hours

Item #	Name	Credits
ECCE 2310	Paraprofessional Methods & Materials	3
ECCE 2312	Paraprofessional Roles & Practices	3
	Minimum Credit Hours for Graduation	72

Early Childhood Care and Education ECC2

Type Diploma

The Early Childhood Care and Education Diploma program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

External Standards

Though not an external accrediting agency, Bright from the Start (BFTS) determines and approves the credentials of

childcare workers in Georgia. TCSG works closely with BFTS to make sure its programs meet the training needs required for approved credentials of early childcare teachers and professionals. To work in a childcare field, an employee must pass a criminal background check. Students should check with the college and employers for details.

The Early Childhood Care and Education, Degree program must conform to the institutional accreditation requirements of the Council on Occupational Education (COE) or the Southern Association of Colleges and Schools Commission on Colleges (COC).

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation on clinical experiences.(ECCE 1121)

Basic Skills Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
	EMPL 1000 or PSYC2-3 1010	

Occupational Courses — 33 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ECCE 1101	Introduction to ECCE	3

ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Child	3
ECCE 1121	ECCE Practicum	3
ECCE 2115	Language Arts and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance & Classroom Management	3

Internship Requirement — 12 Hours

Item #	Name	Credits
ECCE 2245	Early Childhood Care and Education Internship I	6
ECCE 2246	Early Childhood Care and Education Internship II	6
	Minimum Credit Hours for Graduation	53

Child Development Specialist CD61

Type
Technical Certificate of Credit

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more

content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start.

Required Courses — 14-15 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
	ECCE 1121 or EMPL 2-3 1000	
	Minimum Credit Hours for Graduation	14

Early Childhood Care and Education Basics EC31

Type
Technical Certificate of Credit

The Early Childhood Care and Education (ECCE) Basic Child TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and a health, safety and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers and Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic

knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

Required Courses — 9 Hours

Item #	Name	Credits
ECCE 1101	Introduction to ECCE	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
Minimum Credit Hours for Graduation		9

Early Childhood Care Education Course Descriptions

ECCE 1101 : Introduction to ECCE

Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing. **Credits 3**

ECCE 1103 : Child Growth and Development

Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs. **Credits 3**

Prerequisites

ECCE 1101

Corequisites

ECCE 1101

ECCE 1105 : Health, Safety and Nutrition

Introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children. **Credits 3**

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1112 : Curriculum and Assessment

Provides student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media. **Credits 3**

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1113 : Creative Activities for Child

Introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children*s creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children*s creative development; facilitation of children*s creative expression, media, methods and materials across the curriculum; appreciation of children*s art processes and products; appreciation of children*s creativity in music, movement and dance; appreciation of children*s creative expression in play and creative drama; and art and music appreciation. **Credits 3**

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 1121 : ECCE Practicum

Provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

Credits 3

Prerequisites

ECCE 1101

ECCE 1103

ECCE 1105

Corequisites

ECCE 1105

ECCE 2115 : Language Arts and Literacy

Develops knowledge, skills, and abilities in supporting young children*s literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2116 : Math and Science

Presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

Credits 3

Prerequisites

ECCE 1103

Corequisites

ECCE 1103

ECCE 2201 : Exceptionalities

Provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

Credits 3

Prerequisites

ECCE 1103

ECCE 2202 : Social Issues & Family Involvement

Enables the student to value the complex characteristics of children*s families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children*s development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

Credits 3

Prerequisites

ECCE 1103

ECCE 2203 : Guidance & Classroom Management

Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

Credits 3

Prerequisites

ECCE 1103

ECCE 2240 : ECCE Internship

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 12**Prerequisites**

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2245 : Early Childhood Care and Education Internship I

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6**Prerequisites**

ECCE 1103

ECCE 1103

Corequisites

ECCE 1105

ECCE 2246 : Early Childhood Care and Education Internship II

Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Internship topics include promoting child development and learning; building family and community relations; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum; and becoming a professional.

Credits 6**Prerequisites**

ECCE 1103

Corequisites

ECCE 1105

ECCE 2310 : Paraprofessional Methods & Materials

Develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

Credits 3**Prerequisites**

ECCE 1101

ECCE 1103

ECCE 1105

ECCE 2312 : Paraprofessional Roles & Practices

Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

Credits 3**Prerequisites**

ECCE 1101

ECCE 1103

ECCE 1105

ECON - Economics

Economics Course Descriptions

ECON 1101 : Principles of Economics

Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective

Credits 3

ECON 2105 : Macroeconomics

Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

Credits 3

ECON 2106 : Microeconomics

Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, and behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

Credits 3

EDUC - Education

Education ED13**Type**

Associate of Applied Science, AAS

The Education associate of applied science degree program is a series of courses designed to prepare students for a position in education. The program emphasizes a combination of education theory and practical application as well as general core, science, and mathematics competencies necessary for successful employment. Graduates have qualifications to be employed in educational settings including Head Start, Georgia Pre-K programs, and public school teaching assistant positions. Graduates of this program will receive one of two areas of S.T.E.M. specialization: mathematics or science.

*** Students - Choose from and complete either STEM Specialization:**

- Math Concentration (16 hrs)
- Science Concentration (16 hrs)
- Elementary Education Specialization (20 hrs)

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

*** All corresponding labs are corequisite to meet degree requirements**

Item #	Name	Credits
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

General Education Core Electives — 15 Hours

* Choose 15 additional General Education Core Electives (Area I, II, III, or IV)

[General Education Courses](#)

Occupational Courses — 17 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3

EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
COMP 1000	Introduction to Computer Literacy	3

Mathematics Concentration — 16 Hours

Item #	Name	Credits
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Science Concentration — 16 Hours

Choose 16 hours in a Science Concentration

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
	CHEM 1151 or CHEM 1211	4

Elementary Education Specialization — 20 Hours

Item #	Name	Credits
	MATH 1112 or MATH 1113	3
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
EDUC 2000	Written & Verbal Communication for Teachers	3
EDUC 2001	Life & Earth Science for Elementary/Early Childhood Educators	3
EDUC 2008	Mathematics for Elementary/Early Childhood Teachers	3
	Minimum Credit Hours for Graduation	62

Education Paraprofessional EP11 Type

Technical Certificate of Credit

The Education Paraprofessional technical certificate of credit is a series of courses designed to prepare students for a position as a paraprofessional in the public school system. The program emphasizes education theory and practical application competencies necessary for successful employment. Completers will be eligible to take the GACE Paraprofessional licensure exam to qualify to apply for a position as a entry-level paraprofessional in various educational settings.

Required Courses — 14 Hours

EDUC 2110, 2120, and 2130 require 10 hours of field internship.

Item #	Name	Credits
EDUC 2110	Investigating Critical & Contemporary Issues in Education	3
EDUC 2120	Exploring Sociocultural Perspectives and Diversity in Educational Context	3
EDUC 2130	Exploring Teaching and Learning	3
EDUC 2210	Paraprofessional Internship	3
EDUC 2220	Education Review	2
	Minimum Credit Hours for Graduation	14

Education Course Descriptions

EDUC 2000 : Written & Verbal Communication for Teachers

This course is designed to assist teaching candidates in developing the communication skills required for successful and effective classroom instruction. Verbal and written communication skills in standard English will be emphasized. Candidates will perform a variety of communicative tasks to include emails, memoranda, essays, presentations and listening exercises. Topics include written and oral discourse, communication theory, propaganda, and scenario analysis.

Credits 3

Prerequisites

ENGL 1101

EDUC 2001 : Life & Earth Science for Elementary/Early Childhood Educators

An integrated overview of the core life and earth science content covered in the K-5 Georgia Standards of Excellence and Performance Standards. Topics include the solar system, earth processes, living organisms, biodiversity, and the natural history of Georgia.

Credits 3

EDUC 2008 : Mathematics for Elementary/Early Childhood Teachers

An introductory mathematics course for Education majors seeking Elementary teacher certification. This course will emphasize the understanding and use of major concepts of numbers and operations. As a general theme, strategies of problem-solving will be used and discussed in the context of various topics.

Choose one of the following Math Courses:

Credits 3

Prerequisites

MATH 1101

MATH 1111

MATH 1113

EDUC 2110 : Investigating Critical & Contemporary Issues in Education

This course is a critical and theoretical exploration of the "Foundations of Education" and engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia, the United States, and globally. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2120 : Exploring Sociocultural Perspectives and Diversity in Educational Context

Fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine the nature and function of culture; the development of individual and group cultural identity; definitions and implications of diversity; and the influence of culture on learning, development and pedagogy. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2130 : Exploring Teaching and Learning

The study of educational psychology concepts through examination of learning and teaching processes, with the goal of applying this knowledge to enhance the learning of all students in a variety of educational settings and contexts. Successful completion of 10 hours of field experience is required.

Credits 3

Corequisites

Requires 10 Hours of Field Internship.

EDUC 2210 : Paraprofessional Internship

Provides the student with the opportunity to gain a supervised experience in an actual work environment allowing demonstration of techniques obtained from course work. Internship topics include ethical, moral and professional conduct, effective communication skills, use of technology in the classroom, lesson delivery for varied genders, cultures, intellectual abilities, and/or varied learning styles. The student will observe, document, and assess the support of students and the teacher, deliver a group activity, and assist with the development and delivery of a classroom assessment.

Credits 3

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

EDUC 2220 : Education Review

Review of education as it pertains to the Georgia State certifications administered by Georgia Assessments for the Certification of Educators (GACE). Emphasis on the skills and knowledge in reading, writing, and math possessed by prospective and practicing professionals. This review will guide future educators in the certification of their ability and knowledge to assist in classroom instruction.

Credits 2

Prerequisites

EDUC 2110

EDUC 2120

EDUC 2130

Electrical Construction and Maintenance

Electrical Systems Technology ES12

Type

Diploma

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 26 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2

	PHYS 1111 (+ lab) or4 IDSY 1170 or DFTG 2010	
IDSY 1105	AC Circuit Analysis	3
ELTR 1060	Electrical Prints, Schematics & Symbols	2
ELTR 1080	Commercial Wiring I	5
ELTR 1090	Commercial Wiring II	3
ELTR 1180	Electrical Controls	4
	Specific Occupational-Guided Electives (3 credits)	3

Electrical Construction and Maintenance Specialization, 8EC2 — 9 Hours

Item #	Name	Credits
ELTR 1205	Residential Wiring I	3
ELTR 1210	Residential Wiring II	3
	Specific Occupational-Guided Electives (3 credits)	3

Industrial Electrical Technology Specialization, 8I12 — 10 Hours

Item #	Name	Credits
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	N.E.C. Industrial Wiring Applications	4

Field Occupation Specialization, 8F12 — 3 Hours

Item #	Name	Credits
	Specific Occupational-Guided Electives (3 credits)	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	
	Minimum Credit Hours for Graduation	54

NCCER Basic Electrical Systems Technician, BES1

Type
Technical Certificate of Credit

The Basic Electrical Systems Technician Certificate provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and basic wiring operations.

Required Courses — 12 Hours

Item #	Name	Credits
COFC 1080	Construction Trades Core	4

ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1015	Intermediate Electrical Concepts I	4
	Minimum Credit Hours for Graduation	12

Electrical Construction and Maintenance Course Descriptions

ELTR 1015 : Intermediate Electrical Concepts I

This course introduces the student to specific skill components needed to be successful as an electrician. Topics include reading electrical drawings, residential electrical services, test equipment, alternating current, motor theory and applications and basic electrical installation.

Credits 4

ELTR - Electrical Systems

Electrical Systems Course Descriptions

ELTR 1000 : Fundamental Electrical Concepts

This course introduces the student to the electrical trade. Emphasis is placed on orientation to the trade, safety, basic electrical theory, electrical codes, and basic electrical wiring practices.

Credits 4

ELTR 1020 : Alternating Current Fundamentals

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

ELTR 1060 : Electrical Prints, Schematics & Symbols

Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

Credits 2

ELTR 1080 : Commercial Wiring I

This course introduces commercial wiring practices and procedures. Topics include: industrial safety procedures, the National Electrical Code, Principles of Grounding and Bonding, Commercial Services, three-phase power systems, and Electric Motor Fundamentals.

Credits 5

ELTR 1090 : Commercial Wiring II

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credits 3

ELTR 1110 : Electric Motors

Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

Credits 4

ELTR 1180 : Electrical Controls

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls, and variable speed controls.

Credits 4

ELTR 1205 : Residential Wiring I

Introduces residential wiring practices and procedures. Topics include: print reading, National Electrical Code, wiring materials and methods, and control of luminaries and receptacle installation.

Credits 3

ELTR 1210 : Residential Wiring II

Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: single and multi-family load calculations, single and multi-family service installations, sub-panels and feeders, and specialty circuits.

Credits 3

ELTR 1220 : Industrial PLC's

Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and setup, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

Credits 4

Prerequisites

ELTR 1110

ELTR 1180

ELTR 1250 : Diagnostic Troubleshooting

Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

Credits 2

ELTR 1270 : N.E.C. Industrial Wiring Applications

Provides instruction in industrial wiring applications of the National Electrical Code. Topics include: rigid/IMC conduit installation, EMT conduit installation, busways installation, cable tray/wireway installation, and equipment installation (600 volts or less).

Credits 4

ELTR 1510 : Electrical Worker

Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tools on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and switches.

Credits 3

ELTR 1520 : Grounding and Bonding

Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

Credits 2

ELTR 1530 : Conduit Sizing

Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/trade sizes, and percent of fill.

Credits 2

ELTR 1540 : Wire Pulling and Codes

The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

Credits 3

ELCR - Electronics Technology

Electronics Fundamentals EF12

Type
Diploma

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits

COMP 1000	Introduction to Computer Literacy	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3
	Minimum Credit Hours for Graduation	38

Electronics Technology ET14

Type
Diploma

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in biomedical instrumentation, communications electronics, computer electronics, general

electronics, industrial electronics, or telecommunications electronics.

* **Students** - Choose and complete one of the four listed specializations:

- Communications Electronics Technology Specialization 8CE2
- Telecommunications Electronics Technology Specialization 8TE2
- Industrial Electronics Technology Specialization 8IE2
- Field Occupation Specialization 8FC2
- Biomedical Instrumentation Technology Specialization 8BI2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012, MATH 1013	3

Occupational Courses — 30 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5

ELCR 1060	Linear Integrated Circuits	3
	Occupational Elective (3 hrs)	3

Communications Electronics Technology Specialization 8CE2 — 17 Hours

Item #	Name	Credits
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2230	Antenna and Transmission Lines	3
ELCR 2240	Microwave Communications and Radar	3
ELCR 2250	Optical Communication Techniques	3

Telecommunications Electronics Technology Specialization 8TE2 — 18 Hours

Item #	Name	Credits
ELCR 2170	Computer Hardware	5
ELCR 2190	Networking I	3
ELCR 2590	Fiber Optic Systems	3
ELCR 2600	Telecommunication & Data Cabling	3
ELCR 2620	Telecommunications Systems Installation, Programming & Data Transmission	4

Industrial Electronics Technology Specialization 8IE2 — 16 Hours

Item #	Name	Credits
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors & Robotics	3

Field Occupation Specialization 8FC2 — 16 Hours

Item #	Name	Credits
	Occupationally Related Electives	

Biomedical Instrumentation Technology Specialization 8BI2 — 18 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
BMET 1231	Medical Equipment Function & Operation I	4

BMET 2242	Medical Equipment Function & Operation II	4
BMET 2343	Internship Medical Systems	3
Minimum Credit Hours for Graduation		54

Basic Electricity Technician BE31

Type

Technical Certificate of Credit

The Basic Electricity Technician Technical Certificate of Credit provides a basic knowledge of direct current and alternating current circuits and their components.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
Minimum Credit Hours for Graduation		13

Basic Electronic Assembler BE41

Type

Technical Certificate of Credit

The Basic Electronic Assembler certificate program is designed to prepare students for careers as entry-level production technicians in a manufacturing environment, or as service technicians or operators in the telecommunications industry. Topics include basic algebraic

fundamentals, direct current circuits, and soldering techniques.

Required Courses — 10 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
	MATH 1012 or MATH 1013	3
Minimum Credit Hours for Graduation		10

Digital Electronics Technician DET1

Type

Technical Certificate of Credit

This Technical Certificate of Credit provides a basic knowledge of digital-electronics circuits and their components. Career opportunities are possible with BellSouth, Georgia Power, The southern Company, and others. Completion of this Technical Certificate of Credit leads the student into Electronics Fundamentals and/or Electronics Technology programs.

Required Courses — 13 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital & Microprocessor Fundamentals	5
IDFC 1007	Industrial Safety Procedures	2

Minimum Credit 13
Hours for
Graduation

Electrical Lineworker with Pintle Hook Restriction EL21

Type

Technical Certificate of Credit

The Electrical Lineworker with Pintle Hook Restriction certificate program provides students with the necessary knowledge and skills to gain employment as an entry-level lineworker with electrical utility companies, both public and private. Upon successful completion of this program, students meet the federal requirements to test for their Class A license with Pintle Hook Restriction. Topics include fundamentals of commercial driving, CDL road and range driving, lineworker organization principles, general electrical safety, basic electric fundamentals, lineman simulations, observation-based instruction, interview skills, problem-solving, work ethics, and communication skills.

Other Conditions for Admission

- Minimum Required Age: 18
- Candidates must hold a valid Class C driver's license and a valid Commercial Instructional Permit (CLP).

Required Courses — 13 Hours

Item #	Name	Credits
CTDL 1010	Fundamentals of Commercial Driving	3

ELCR 1900	Introduction to Electrical Lineworker	3
ELCR 1920	Electrical Lineworker Skills	3
ELCR 1940	CDL with Pintle Hook Restriction: Range and Road Work	4
	Minimum Credit Hours for Graduation	13

Mobile Electronics Technician ME61

Type

Technical Certificate of Credit

The Mobile Electronics Technician Technical Certificate of Credit is designed to provide students with short term training to prepare them for entry level employment in the field of car audio systems installation. Topics include direct and alternating current principles, soldering techniques, and system installation procedures.

Required Courses — 4 Hours

Item #	Name	Credits
ELCR 1005	Soldering Technology	1
ELCR 1300	Mobil Audio & Video Systems	3

DC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Select one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
	Minimum Credit Hours for Graduation	10

Electronics Technology Course Descriptions

BMET 1231 : Medical Equipment Function & Operation I

This course introduces the study of electromechanical systems currently in use throughout the health care field with an emphasis on typical biomedical instrumentation. Topics include monitors, ECG machines, intensive care units, coronary care units, operating room equipment, and telemetry systems.

Credits 4

BMET 2242 : Medical Equipment Function & Operation II

Continues the study of electromechanical systems currently in use throughout the health care field. Topics include: life support equipment, respiratory instrumentation, measuring brain parameters, medical ultrasound, electrosurgery units, and hemodialysis machines.

Credits 4

Prerequisites

ALHS 1011

BMET 1231

BMET 2343 : Internship Medical Systems

Introduces the student to an on-site learning experience at an operating biomedical equipment section of a health care facility. Supervision of the intern is shared by the working environment supervisor and the faculty advisor. Internist performance is evaluated at weekly seminars.

Topics include: problem-solving, use of proper interpersonal skills, interpreting work authorizations, identifying logistical support requirements, servicing biomedical instruments, evaluating operating costs, and professional development.

Credits 3

Prerequisites

BMET 1231

ELCR 1005 : Soldering Technology

Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

Credits 1

ELCR 1010 : Direct Current Circuits

This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.
Credits 6

ELCR 1020 : Alternating Current Circuits

This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

Credits 7

Prerequisites

ELCR 1010

ELCR 1030 : Solid State Devices

This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

Credits 5

Prerequisites

ELCR 1010

ELCR 1020

ELCR 1040 : Digital & Microprocessor Fundamentals

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

Credits 5

Prerequisites

ELCR 1020

ELCR 1060 : Linear Integrated Circuits

Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

Credits 3

Prerequisites

ELCR 1020

ELCR 1230 : Communications Electronics Survey

Introduces the fundamental concepts and devices used in electronics communications. Topics include: transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

Credits 3

ELCR 1240 : Industrial Electronics Survey

Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include: process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

Credits 3

ELCR 1300 : Mobil Audio & Video Systems

Provides the fundamental concepts for the installation of automotive audio and video systems. Topics include: charging and electrical systems, automotive wiring harnesses, basic audio systems, advanced audio systems, and mobile video systems.

Credits 3

ELCR 1800 : Electrical Lineworker Organization Principles

This course provides a comprehensive summary of lineworker requirements. Topics include physical and mechanical abilities, electrical and workplace safety practices, communications skills, and positive work ethic responsibilities.

Credits 3

ELCR 1820 : Electrical Lineworker Workplace Skills

This course will familiarize the student with the importance of working together and team building. Topics include basic tools in the problem solving process, change in the workplace, developing and maintaining a positive image, resume writing, and developing job interview skills.

Credits 2

ELCR 1840 : Electrical Lineworker Automation Skills

This course familiarizes the student with the identification, proper use, basic electrical fundamentals, and safety and maintenance of lineworker hand and power tools. Students will be prepared to operate hydraulic and pneumatic systems.

Credits 2

ELCR 1860 : Electrical Lineworker Occupational Skills

This course provides an introduction to the basic skills necessary for an electrical lineworker. Topics include an understanding of ratios and proportions, blueprint reading, CSL training and testing, lineman simulations, and observation based instruction.

Credits 5

ELCR 1900 : Introduction to Electrical Lineworker

This course provides a comprehensive summary of lineworker requirements. Topics include general electrical safety, effective communication skills, positive work ethics, problem-solving, and job interview skills.

Credits 3

ELCR 1920 : Electrical Lineworker Skills

This course familiarizes the student with the fundamental skills needed for an electrical lineworker. Topics include hand tools, power tools, and basic electric fundamentals. Students also participate in lineman simulations and complete an observation-based instruction activity.

Credits 3

ELCR 1940 : CDL with Pintle Hook Restriction: Range and Road Work

This course familiarizes students with truck instruments, controls, and performing basic maneuvers required to drive safely in a Class A vehicle with a pintle hook restriction. Each student must demonstrate proficiency in performing range operations such as operating a truck through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling while on the range. Each student must also demonstrate proficiency when driving on the road under a multitude of conditions.

Credits 4

Corequisites

CTDL 1010

ELCR 2110 : Process Control

Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

Credits 3

Prerequisites

ELCR 1020

ELCR 2120 : Motor Controls

Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

Credits 3

Prerequisites

ELCR 1030

ELCR 1020

ELCR 2130 : Programmable Controllers

Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

Credits 3

Prerequisites

ELCR 1020

ELCR 2140 : Mechanical Devices

Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

Credits 2

ELCR 2150 : Fluid Power

Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

Credits 2

ELCR 2160 : Advanced Microprocessors & Robotics

This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

Credits 3

Prerequisites

ELCR 1040

ELCR 1020

ELCR 2170 : Computer Hardware

Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

Credits 5

ELCR 2190 : Networking I

Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

Credits 3

ELCR 2210 : Analog Communications

This course provides an in depth study of communication system concepts and emphasis an analysis of amplitude and frequency modulation and detection methods. Topics include AM, FM, and SSB modulation and detection, transmitters and receivers, multiplexing and de-multiplexing, basic telemetry concepts, and noise bandwidth considerations.

Credits 5

Prerequisites

ELCR 1020

ELCR 2220 : Digital Communications

This course continues the study of modulation and detection techniques. Topics include: digital modulation techniques, pulse modification techniques, and sampling techniques.

Credits 3

Prerequisites

ELCR 1020

ELCR 2230 : Antenna and Transmission Lines

Provides an understanding of antennas and transmission lines used in communications. Topics include: transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

Credits 3

Prerequisites

ELCR 1020

ELCR 2240 : Microwave Communications and Radar

Provides a basic understanding of microwave communications and radar. Topics include: microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communications systems.

Credits 3

Prerequisites

ELCR 1020

ELCR 2250 : Optical Communication Techniques

Surveys the major optical devices used for communications. Topics include: light sources, fiber optic cable, coupling and fusing, light modulation and detection techniques, and system application of light devices.

Credits 3

Prerequisites

ELCR 1020

ELCR 2560 : Cet License Preparation

Prepares the student for taking a certifying examination developed by Iowa State University and administered by the Electronic Technician*s Association. Topics include: mathematics; electrical properties; series and parallel circuits; oscillators, detectors, comparators, and demodulators; test equipment and measurement; electronic components and nomenclature; semiconductors; digital concepts; computer basics; communications electronics; safety precautions and checks; television and video; antennas and signal distribution; consumer electronics; and block diagrams and troubleshooting.

Credits 3

ELCR 2590 : Fiber Optic Systems

Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

Credits 3

ELCR 2600 : Telecommunication & Data Cabling

Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

Credits 3

Prerequisites

ELCR 1010

ELCR 1020

ELCR 2620 : Telecommunications Systems Installation, Programming & Data Transmission

This course provides instruction in the installation, programming, testing, and repair of simple and complex telephone systems. An introduction is also given to basic concepts on telecommunication and data transmission.

Credits 4

Corequisites

ELCR 1020

ELCR 2600

UAST - Electronics- Computer Engineering Technology

Unmanned Aerial Systems Technology, UAS1

Type

Technical Certificate of Credit

The Unmanned Aerial Systems Technology TCC provides students the opportunity to

expand their Electrical and Computer Engineering training with the basic skills to repair and operate Unmanned Aerial Vehicles, also known as Drones. The completion of this certificate shows employers that progress has been made in the program and basic skills have been achieved. The program emphasizes the application of computer programming, digital systems, electromechanical devices, programmable logic controllers, engineering in the development of technology, as well as the training on operation, inspection, maintenance, service, and repair of drones.

— 18 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
ELCR 1005	Soldering Technology	1
ECET 1191	Computer Programming Fundamentals	3
ICET 2010	Electromechanical Devices	4
UAST 1100	Drone Applications	3
Minimum Credit Hours for Graduation		18

Electronics- Computer Engineering Technology Course Descriptions

ECET 1191 : Computer Programming Fundamentals

This course emphasizes fundamental concepts of problem-solving using a high-level source language. Laboratory work is designed to acquaint students with computer facilities, software, and programming fundamentals. Topics include system fundamentals, concepts of structured programming, arrays, functions, and engineering applications.

Credits 3

ICET 2010 : Electromechanical Devices

This course introduces electromechanical devices which are essential control elements in electrical systems. Topics include fundamentals of electromechanical devices, control elements in electrical circuits, typical devices such as generators and alternators, D.C. and A.C. motors and controls, and transformers. Quantitative analysis of power losses, power factors, and efficiencies in D.C., single-phase and three-phase dynamos are stressed. Laboratory work parallels classwork.

Credits 4

Prerequisites

ECET 2101

UAST 1100 : Drone Applications

This course introduces fundamental concepts necessary for the operation of unmanned aerial vehicles (drones) and prepares students for drone use in commercial settings. Laboratory demonstrations and student practice parallel course work. Topic includes Commercial Applications, Laws and Regulations, Drone Operations, Operational limitations, Remote Pilot in Command Certification and Responsibilities, Aircraft Requirements and Safety Considerations.
Credits 3

ECET - Engineering Technology

Engineering Technology ET33

Type

Associate of Applied Science, AAS

The Engineering Technology Program is intended to provide the opportunity for students to explore a career in engineering at the professional level. Program graduates will receive an Associate of Applied Science degree in Engineering Technology, qualifying them as engineering technicians with a specialization in mechanical engineering technology or electrical engineering technology.

Other conditions for Admission

MATH 1111, College Algebra, is a prerequisite course for MATH 1113, Precalculus

Select one of the following Specializations:

- Electrical Engineering, 8E13

- Industrial Engineering Technology, 8I23
- Mechanical Engineering Technology, 8ME3

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

* Choose one of the following:

Item #	Name	Credits
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1113	Precalculus	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits

MUSC 1101	Music Appreciation	3
ARTS 1101	Art Appreciation	3

Additional General Education — 4 Hours

Item #	Name	Credits
MATH 1131	Calculus I	4

Occupational Courses — 21 Hours

Item #	Name	Credits
DFTG 2010	Engineering Graphics	4
ENGL 1102	Literature and Composition	3
ENGL 1105	Workplace and Technical Communications	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1
SPCH 1101	Public Speaking	3

Chemistry Course — 4 Hours

* Choose one of the following courses and the corresponding lab:

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1

CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Electrical Engineering Technology 8EI3 — 23 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4
ECET 1110	Digital Systems	4
ECET 2120	Electronic Circuits	4
MATH 1132	Calculus II	4

Industrial Engineering Technology, 8I23 — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Process	3
MEGT 1321	Machining and Welding	2
	Guided Electives - 9 Credit Hours	9

Mechanical Engineering Technology, 8ME3 — 22 Hours

Item #	Name	Credits
MATH 1132	Calculus II	4

DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
	MET Occupation Courses - minimum 9 credits	9
	Guided Electives 3+	3
	Minimum Credit Hours for Graduation	63

Engineering Technology Basics EBT1 Type

Technical Certificate of Credit

The Engineering Technology Basics certificate program provides training in core engineering techniques. These techniques include drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

* Students must choose one of the following options:

- Biology Cluster Option (8 hrs)
- Chemistry Cluster (8 hrs)
- Physics Option (4 hrs)
- ECET Option (4 hrs)

Required Courses — 12 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

ENGT 1000	Introduction to Engineering Technology	3

Biology Cluster Option — 8 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1

Chemistry Cluster Option — 8 Hours

Item #	Name	Credits
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1

Physics Option — 4 Hours

Item #	Name	Credits
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

ECET Option — 4 Hours

Item #	Name	Credits
ECET 1101	Circuit Analysis I	4

Drafting Course — 4 Hours

* Choose one of the following:

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 2010	Engineering Graphics	4
	Minimum Credit Hours for Graduation	20

Engineering Technology Fundamentals EF11

Type

Technical Certificate of Credit

The intent of the Engineering Fundamentals technical certificate of credit is to expose students to Engineering Technology and Civil Engineering Technology. Provides training in core engineering techniques. These techniques include drafting and design, and complex mathematical calculations. Topics also include engineering project write-ups, presentation, evaluation, and safety.

Required Courses — 9 Hours

Item #	Name	Credits
ENGT 1000	Introduction to Engineering Technology	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3

4 Credit Option — 4 Hours

* Select either DFTG course or PHYS 1111 and Lab

Item #	Name	Credits
DFTG 1101	CAD Fundamentals	4
DFTG 1105	3D Mechanical Modeling	4
DFTG 2010	Engineering Graphics	4
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
	Minimum Credit Hours for Graduation	13

Engineering Technology Course Descriptions

ECET 1101 : Circuit Analysis I

Emphasizes the knowledge and ability to analyze basic DC circuits and introductory concepts of AC circuits. Topics include: international units, basic electrical laws, series and parallel circuits, network analysis concepts, network theorems concepts, D.C. instruments, grounding techniques, magnetism, inductance/capacitance, transient analysis, and introduction to dependent sources and 2-port parameters. Laboratory work parallels class work.

Credits 4

Corequisites

ENGT 1000

MATH 1111

ECET 1110 : Digital Systems

Study of digital circuit fundamentals with an emphasis on digital electronics and techniques, simplification of logic circuits, sequential and combinational logic circuits, programmable logic devices, flip-flops and registers, binary number system, and arithmetic and logic operations. Laboratory work parallels class work using trainers, DesignWorks, and Altera simulation software and system.

Credits 4

Prerequisites

ENGT 1000

ECET 2101 : Circuit Analysis II

Continues study of AC circuit analysis, which emphasizes complex networks. Topics include: analysis of complex networks, networks with multiple sources, AC network theorems, resonance, transformers, three-phase systems, filters and bode plots, non-sinusoidal waveforms, and pulse response of RLC circuits. Laboratory work parallels class work.

Credits 4

Prerequisites

ECET 1101

MATH 1111

ECET 2120 : Electronic Circuits

Introduces the conduction process in semiconductor materials and devices. Topics include semiconductor physics; diodes; basic diode circuits and applications; biasing, stability and graphical analysis of bipolar junction transistors and field effect transistors; introduction to silicon controlled rectifiers; device curve characteristics; and related devices with selected applications. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE.

Credits 4

ENGT 1000 : Introduction to Engineering Technology

Provides a study of engineering technology as a career field and describes the knowledge and skills required for academic and occupational success. Topics include: engineering technology career, measurement and standards, mathematical operators, engineering tools, and engineering concepts. Labs reinforce mathematical, mechanical and electrical concepts through practical exercises, such as measurement and calculation of density of objects, relative humidity, use of digital multi-meter, building circuits, use of precision instruments, and team exercises.

Credits 3

ENGL - English

English Course Descriptions

ENGL 0090 : Learning Support English I

This course uses a modular approach to emphasize the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development. Students progress at their own pace to master each module.

Credits 3

ENGL 1010 : Fundamentals of English I

Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

Credits 3**Prerequisites**

minimum ACCUPLACER Reading score of 55 and minimum ACCUPLACER Sentence Skills (Writing) of 60.

ENGL 1012 : Fundamentals of English II

Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

Credits 3**Prerequisites**

ENGL 1010: Fundamentals of English.

ENGL 1101 : Composition and Rhetoric

Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

Credits 3**Prerequisites**

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 249.

ENGL 1102 : Literature and Composition

Emphasizes the students ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

Credits 3**Prerequisites**

ENGL 1101

ENGL 1105 : Workplace and Technical Communications

Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

Credits 3**Prerequisites**

ENGL 1101

ENGL 2110 : World Literature

This course explores the history of the human experience through literature and writing across the cultures of the world. Surveys of important works across multiple genres of fiction and non-fiction as a reflection of cultural values. Explores themes from the ancient through modern era.

Credits 3**Prerequisites**

ENGL 1101

ENGL 2130 : American Literature

Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

Credits 3**Prerequisites**

ENGL 1101

ARTS - Fine Arts

Fine Arts Course Descriptions

ARTS 1101 : Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

Credits 3**Prerequisites**

minimum ACCUPLACER Reading score of 64 and minimum ACCUPLACER Sentence Skills (Writing) of 70

MUSC 1101 : Music Appreciation

Explores the formal elements of musical composition, musical form and style, and the relationship of music to historical periods. The course includes listening and analysis of well known works of music. This course encourages student interest in musical arts beyond the classroom.

Credits 3

FORS - Forestry

Forestry Technology FT13

Type

Associate of Applied Science, AAS

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Degree which qualifies them as forest technicians.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3

FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4
FORS 2460	Forest Management	6
	Guided Electives 3+	3

Forest Internship/ Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1580	Wildlife Management	3
FORS 1600	Forest Technology Internship	3
	Minimum Credit Hours for Graduation	62

Forestry Technology FT12

Type
Diploma

The Forest Technology program is a sequence of courses that prepares students for employment in the field of forestry. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The technical knowledge and skills in this program focus on forest

biology, forest products, forest protection, forest management, forest measurements, and surveying and mapping. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive a Forest Technology Diploma which qualifies them as forest technicians.

Basic Skills — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 41 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1020	Soils and Hydrology	3
FORS 1030	Dendrology	3
FORS 1040	Forest Protection	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
FORS 1260	Forest Measurements	4
FORS 1310	Silvics and Silviculture	4
FORS 1410	Forest Mensuration	4

FORS 2460	Forest Management	6

Forest Internship/Management Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
FORS 1600	Forest Technology Internship	3
FORS 1580	Wildlife Management	3
	Minimum Credit Hours for Graduation	52

Basic Timber Harvesting BT41

Type
Technical Certificate of Credit

The Basic Timber harvesting technical certificate of credit program provides skills necessary for program completers to obtain entry-level employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills and timber industry standards. The student obtains Master Timber Harvester Certification.

Required Courses — 12 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3
THOP 1104	Timber Industry Standards	3

Minimum Credit Hours for Graduation	12

Forestry Technician Assistant FTA1

Type
Technical Certificate of Credit

The Forest Technician Assistant technical certificate of credit provides skills necessary for program completers to obtain entry-level employment in the area of forestry. Topics include: safety, dendrology, product identification and utilization, surveying and mapping, and forest measurements.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1030	Dendrology	3
FORS 1260	Forest Measurements	4
FORS 1160	Forest Surveying and Mapping	4
	Minimum Credit Hours for Graduation	14

Land Surveying Technician LST1

Type
Technical Certificate of Credit

The Land Surveying Technician technical certificate of credit program is intended to produce graduates who are prepared for employment as Land Surveying Technicians in organizations that conduct land surveying activities.

Required Courses — 14 Hours

Item #	Name	Credits
FORS 1010	Introduction to Forestry & Natural Resources	3
FORS 1160	Forest Surveying and Mapping	4
FORS 1210	GPS/GIS Aerial Photography	4
MATH 1012	Foundations of Mathematics	3
	Minimum Credit Hours for Graduation	14

Timber Harvesting Operations THO1

Type

Technical Certificate of Credit

The Timber Harvesting Operations technical certificate of credit program provides skills necessary for program completers to obtain employment in the area of timber harvesting. Topics include: safety, forest products marketing, woodland skills, timber industry standards, timber harvesting equipment operations, and equipment maintenance.

High School Diploma or GED Required

For Admission: No

For Graduation: Yes

Required Courses — 18 Hours

Item #	Name	Credits
THOP 1101	Introduction to Timber Harvest Safety	3
THOP 1102	Forest Products Marketing	3
THOP 1103	Woodland Skills	3

THOP 1104	Timber Industry Standards	3
THOP 1105	Timber Harvest Equip Oper I	3
THOP 1106	Timber Harvest Equip Oper II	3
	Minimum Credit Hours for Graduation	18

Forestry Course Descriptions

FORS 1010 : Introduction to Forestry & Natural Resources

Introduces the fundamentals of forestry and natural resources. Topics include: history of forestry, importance of forestry, forest safety, harvesting equipment, and natural resource careers.

Credits 3

FORS 1020 : Soils and Hydrology

Introduces the role of forest soils and hydrology in the forest ecosystem and the importance of forest soil properties as they relate to modern forestry practices. Topics include: forest soil formation, forest soil properties and site productivity, soils and silvicultural recommendations, fertilization, soil hydrology and erosion sedimentation.

Credits 3

FORS 1030 : Dendrology

Provides the basis for a fundamental understanding of the taxonomy and identification of trees and shrubs. Topics include: tree and shrub classification, tree and shrub identification, tree and shrub structure identification, and leaf structure identification.

Credits 3

FORS 1040 : Forest Protection

Provides experience in identification and control of destructive and harmful agents in the forest environment. Topics include: detrimental growth factors; biological and economic factors of forest pests, chemical pest control; classification and description of wildfires; and firefighting methods, tools and equipment.

Credits 3

FORS 1100 : Forest Technology

This course introduces basic forest management concepts and techniques. Topics include forest protection, products, harvesting, silviculture, and measurements. Upon completion students should have a fundamental understanding of the different aspects of forest management in the southeastern United States.

Credits 3

FORS 1160 : Forest Surveying and Mapping

Introduces the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Topics include: surveying and mapping equipment, surveying, surveying and mapping methods, deed search and tract location.

Credits 4

Corequisites

MATH 1012

FORS 1210 : GPS/GIS Aerial Photography

Focuses on application of the fundamental principles and practices of land surveying and mapping and the use of surveying and mapping instruments. Emphasizes areas of plane and boundary surveying and area determination. Topics include: Global positioning systems (GPS), geographical information systems (GIS), area determination, developing maps, and aerial photography.

Credits 4

Prerequisites

MATH 1012

FORS 1160

FORS 1260 : Forest Measurements

Emphasizes identification of primary and secondary forest products and their manufacturing processes and uses and fixed plot method of statistical sampling. Introduces the fundamental principles and practices of timber cruising. Topics include: history of forest products manufacturing, raw forest resource identification, importance of forest measurements, forest measurement tools and equipment, forest measurement methods, and cruising and scaling methods.

Credits 4

Corequisites

MATH 1012

FORS 1310 : Silvics and Silviculture

Provides an overview of the activities that are involved in regeneration and maintenance of forest stands. Topics include: timber stand improvement methods, regeneration methods and environmental impact of silvicultural practices.

Credits 4

FORS 1410 : Forest Mensuration

Focuses on the application of the fundamental principles and practices of timber cruising. Emphasizes fixed plot and prism method of statistical sampling. Topics include: map construction, cruising methods and volume determination.

Credits 4

Prerequisites

FORS 1260

Corequisites

MATH 1012

FORS 1580 : Wildlife Management

Develops a basic understanding of the classification of animals and habitat. Emphasizes effects of forest management on wildlife. Topics include: animal classification, adaptation, and evolution; population parameters; basic principles of game management; and managing the forest for wildlife.

Credits 3

FORS 1600 : Forest Technology Internship

Focuses on the application and reinforcement of forest technology skills in an actual workplace environment. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into forestry applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of forest technology skills in a workplace setting, and professional development.

Credits 3

FORS 2460 : Forest Management

Introduces the techniques of multiple-use forest resource management. Topics include: multiple-use management, prescribed burning, site preparation methods, logging, forest management plan, land ownership, and timber marking.

Credits 6

Corequisites

FORS 1260

FORS 1310

THOP 1101 : Introduction to Timber Harvest Safety

Introduces the fundamentals of timber harvesting safety. Topics include: first aid, CPR, personal protective equipment, OSHA, and other related timber industry safety practices.

Credits 3

THOP 1102 : Forest Products Marketing

This course introduces the principles of marketing forest products. Emphasis is placed on marketing timber, identifying applicable markets and developing basic marketing strategies for forest products.

Credits 3

THOP 1103 : Woodland Skills

Introduces the fundamentals of tree identification, land surveying, and timber cruising.

Credits 3

THOP 1104 : Timber Industry Standards

Introduces the fundamentals of timber industry standards and ethics. Students will learn and apply: timber harvesting laws and regulations, OSHA requirements and laws pertaining to trucking requirements for state and federal highways.

Credits 3

THOP 1105 : Timber Harvest Equip Oper I

This course covers preventive maintenance techniques on equipment used in association with timber harvesting operations. This course also introduces students to the concepts of felling, skidding, delimbing and loading of timber products.

Credits 3

Prerequisites

THOP 1101

THOP 1106 : Timber Harvest Equip Oper II

Students will learn to operate basic timber harvesting equipment and become familiar with the daily operations of each piece of equipment.

Credits 3

Prerequisites

THOP 1105

General Business

General Business GB13

Type

Associate of Science, AS

The Associate of Science in General Business Degree program provides an introductory foundation to core aspects of the business environment while also preparing students for continued study in the field of business. The program develops skills through course work in communications, social/behavioral sciences, natural sciences, mathematics, and the humanities as well as in the business disciplines. Graduates may pursue additional education opportunities at senior institutions or pursue a variety of entry-level positions in the broad career field of business.

Area I - Language Arts/Communications — 9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
SPCH 1101	Public Speaking	3

Area II - Social/Behavioral Sciences — 15 Hours

Item #	Name	Credits
POLS 1101	American Government	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
	HIST 2111 or HIST 2112	3
	Specific Area II GB13 Selection	3

Area III - Natural Science Sequence — 8 Hours

Select 8 Credit hours from the following list:

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3

CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1152L	Survey of Organic Biochemistry Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area III - Mathematics Options — 6 Hours

Item #	Name	Credits
MATH 1127	Introduction to Statistics	3
	MATH 1101 or MATH 1111	3

Area IV - Humanities/ Fine Arts — 6 Hours

Item #	Name	Credits
ENGL 2130	American Literature	3
	Specific Area IV GB13 Selection	3

Occupational Courses — 24 Hours

Item #	Name	Credits
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1120	Spreadsheet Applications	4
ACCT 2000	Managerial Accounting	3
ACCT 2140	Legal Environment of Business	3

ACCT 2145	Personal Finance	3
MGMT 1120	Introduction to Business	3
Minimum Credit Hours for Graduation		68

General Studies AB73

Type

Associate of Science, AS

Area I - Language Arts/Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3

Area II - Social/Behavioral Sciences — 6 Hours

Item #	Name	Credits
POLS 1101	American Government	3
	HIST 2111 or HIST 2112	3

6 hours from the following: — 6 Hours

Item #	Name	Credits
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
PSYC 1101	Introductory Psychology	3

SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, 1103, or 1111	3

Select 4 hours for the following Science Courses — 4 Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1

Area III Elective (3 or 4 hrs) — 3 Hours

Any Biology, Chemistry, Math, or Physics Course that you have not already taken.

Area IV - Humanities/Fine Arts — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Area V - Institutional Courses — 5 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations & Professional Development	2

General Education Core Elective — 3 Hours

* Choose one additional course from the complete Area I, II, III, or IV listings:

[General Education Courses](#)

General Studies Program Specific Electives — 18 Hours

* Choose 18 additional credit hours from approved courses not already used to satisfy requirements in Area I, II, III, or IV:

[General Education Courses](#)

Minimum Credit Hours for Graduation	60

General Business Course Descriptions

General Studies Area III Elective :
3 or 4 hrs

3 hours in Biology, Chemistry, Math, or Physical Science Courses that you have not already taken.

Government

Government Course Descriptions

POLS 1101 : American Government

Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum ACCUPLACER Sentence Skills (Writing) of 236.

HIST - History

History Course Descriptions

HIST 1111 : World History I

Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

Credits 3

HIST 1112 : World History II

Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

Credits 3

HIST 2111 : U.S. History I

Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

Credits 3

HIST 2112 : U.S. History II

Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War I; World War II; the Cold War and the 1950's; the Civil Rights Movement; the 1960's and 1970's; and America since 1980. Credits 3

HORT - Horticulture

Horticulture EH13

Type

Associate of Applied Science, AAS

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization - 8GH3

- Floral Management Specialization - 8L13
- Landscape Specialization - 8FM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3
POLS 1101	American Government	3
HIST 1111	World History I	3
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1100	Quantitative Skills & Reasoning	3

Area IV - Humanities — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Occupational Courses — 21 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Specific Occupational-Guided Electives (3 credits)	3
HORT 1150 or HORT Elective	Horticulture Internship or HORT Elective	3

General Horticulture Specilization - 8GH3 — 24 Hours

Item #	Name	Credits
HORT 1030	Greenhouse Management	4
HORT 1041	Landscape Construction	4
HORT 1050	Nursery Production & Management	4
HORT 1060	Landscape Design	4
HORT 1070	Landscape Installation	4
HORT 1120	Landscape Management	4
HORT 1140	Horticulture Business Management	3
HORT 1150	Horticulture Internship	3
HORT 1310	Irrigation & Water Management	4
HORT 1330	Turfgrass Management	4
HORT 1430	Advanced Landscape Design	3
HORT 1560	Computer Aided Landscape Design	3
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4
HORT 2249	Flower Shop Management	3

Floral Management Specialization - 8FM3 — 24 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 1750	Interiorscaping	4

HORT 2249	Flower Shop Management	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3
	Specific Occupational-Guided Electives (3 credits)	3

Landscape Specialization - 8L13 — 24 Hours

Item #	Name	Credits
HORT 1041	Landscape Construction	4
HORT 1060	Landscape Design	4
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
	HORT Elective (4hrs)	4
	Minimum Credit Hours for Graduation	60

Horticulture EH12

Type
Diploma

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the

program provides opportunities to retrain or upgrade present knowledge and skills.

*** Students must select one of the following specializations:**

- General Horticulture Specialization
- Landscape Management Specialization

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
	Elective (3 credits +)	3
	HORT Elective (4hrs)	4

General Horticulture Specialization — 15 Hours

Item #	Name	Credits
Guided Electives		

Landscape Management Specialization — 15 Hours

Item #	Name	Credits
HORT 1120	Landscape Management	4
HORT 1330	Turfgrass Management	4
HORT 1310	Irrigation & Water Management	4
Guided Electives		
Minimum Credit Hours for Graduation		45

Floral Designer FD11

Type
Technical Certificate of Credit

The floral designer certificate prepares students for career opportunities in the floral and special events industry. Students will receive hands-on instruction in the identification of commonly used plant material as well as instruction in how to prepare, design arrange and care for flowers in the florist shop and used in special events. Courses will help students become aware of the business side of floral work as well as the design theory behind standard industry practices. This program provides courses that will produce a well-rounded floral professional with a solid background in the floral industry. Technical courses apply to the degree or diploma program in horticulture. This certificate is an excellent addition

to the landscape design, interior design, commercial photography, and culinary arts degrees.

Required Courses — 15 Hours

Item #	Name	Credits
HORT 1720	Introductory Floral Design	4
HORT 1730	Advanced Floral Design	4
HORT 2249	Flower Shop Management	3
	HORT Elective (4hrs)	4
Minimum Credit Hours for Graduation		15

Garden Center Technician GC31

Type
Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

High School Diploma or GED Required
For Admissions: No
For Graduation: Yes

Required Courses — 12 Hours

Item #	Name	Credits
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1080	Pest Management	3
HORT 1140	Horticulture Business Management	3

Minimum Credit Hours for Graduation

Landscape Specialist LS11

Type
Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping. Students will also develop contemporary business concepts as they apply to landscape and garden centers.

Required Courses — 17 Hours

Item #	Name	Credits
HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1070	Landscape Installation	4
HORT 1080	Pest Management	3
HORT 1120	Landscape Management	4
Minimum Credit Hours for Graduation		17

Nursery/Greenhouse Technician PPS1

Type
Technical Certificate of Credit

Prepare graduates for challenging careers in the expanding field of Landscaping and Garden Centers.

Required Courses — 17 Hours

Item #	Name	Credits

HORT 1000	Horticulture Science	3
HORT 1010	Woody Plant Identification	3
HORT 1020	Herbaceous Plant Identification	3
HORT 1030	Greenhouse Management	4
HORT 1050	Nursery Production & Management	4
Minimum Credit Hours for Graduation		17

Horticulture Course Descriptions

HORT 1000 : Horticulture Science

Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

Credits 3

HORT 1010 : Woody Plant Identification

Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

Credits 3

HORT 1020 : Herbaceous Plant Identification

Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

Credits 3

HORT 1030 : Greenhouse Management

This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

Credits 4

HORT 1041 : Landscape Construction

This course develops fundamental skills in landscape construction with an emphasis on landscape grading, drainage, retaining walls, and pavements. Topics include workplace safety, site preparation, project layout, construction methods, sequencing, and managerial functions.

Credits 4

HORT 1050 : Nursery Production & Management

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

Credits 4

HORT 1060 : Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/ commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

Credits 4

HORT 1070 : Landscape Installation

This course develops skills needed for the proper selection, installation, and establishment of landscape trees, shrubs, groundcovers, turf, and flowers. Topics include workplace safety, interpreting a landscape plan, soil preparation, planting methods, post care and establishment, and managerial functions for landscape installers.

Credits 4

HORT 1080 : Pest Management

This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

Credits 3

HORT 1120 : Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

Credits 4

HORT 1140 : Horticulture Business Management

This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

Credits 3

HORT 1150 : Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

Credits 3

HORT 1150 or HORT Elective : Horticulture Internship or HORT Elective

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

or

HORT Elective
Credits 3

HORT 1310 : Irrigation & Water Management

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

Credits 4

HORT 1330 : Turfgrass Management

A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds; and estimating costs on management practices.

Credits 4

HORT 1430 : Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

Credits 3

HORT 1560 : Computer Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

Credits 3

HORT 1720 : Introductory Floral Design

This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

Credits 4

HORT 1730 : Advanced Floral Design

Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and high-style floral designs.

Credits 4

HORT 1750 : Interiorscaping

This course develops students' skills in designing, installing, and maintaining interior plantings. Topics include: an industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, and designs and installations.

Credits 4

HORT 2249 : Flower Shop Management

Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

Credits 3

HUMN - Humanities

Humanities Course Descriptions

HUMN 1101 : Introduction to Humanities

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

Credits 3

Prerequisites

ENGL 1101

IDSY - Industrial Systems

Electrical Control Systems EC22

Type

Diploma

The Electrical Control Systems Diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLC's, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

DC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Occupational Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3
ELTR 1020	Alternating Current Fundamentals	3

Occupational Courses — 30 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4

IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1220	Intermediate Industrial PLC's	4
IDSY 1230	Industrial Instrumentation	4
	Specific Occupational-Guided Electives (6 credits)	6
	Minimum Credit Hours for Graduation	44

Industrial Mechanical Systems IMS2

Type
Diploma

The Industrial Mechanical Systems Diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems, diploma that qualifies them for employment as an industrial maintenance mechanic.

Basic Skills Core — 8 Hours

Item #	Name	Credits

EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 37 Hours

Item #	Name	Credits
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1160	Mechanical Laws & Principles	4
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
IDSY 1240	Maintenance for Reliability	4
	Occupational Electives (11 hrs)	11

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDFC 1011	Direct Current I	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDSY 1105	AC Circuit Analysis	3

IDFC 1012	Alternating Current I	3
ELTR 1020	Alternating Current Fundamentals	3
	Minimum Credit Hours for Graduation	51

Industrial Systems Technology IST4

Type
Diploma

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

Basic Skills Core — 8 Hours

Item #	Name	Credits
EMPL 1000	Interpersonal Relations & Professional Development	2

ENGL 1010	Fundamentals of English I	3
	MATH 1012 or MATH 1013	3

Occupational Courses — 38 Hours

Item #	Name	Credits
IDSY 1101	DC Circuit Analysis	3
IDSY 1105	AC Circuit Analysis	3
IDSY 1170	Industrial Mechanics	4
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	IST4 Occupational Electives	9
	Minimum Credit Hours for Graduation	46

Industrial Fluid Power Technician IF1 I

Type

Technical Certificate of Credit

The Industrial Fluid Power Technician certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

Required Courses — 11 Hours

Item #	Name	Credits
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3
	Minimum Credit Hours for Graduation	11

Industrial Motor Control Technician IM4 I

Type

Technical Certificate of Credit

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1210	Industrial Motor Controls II	4
IDSY 1130	Industrial Wiring	4
	Minimum Credit Hours for Graduation	12

Manufacturing Maintenance Fundamentals MM1 I

Type

Technical Certificate of Credit

The Manufacturing Maintenance Fundamentals Technical Certificate of Credit provides training to assist students employed in a variety of positions within the industrial equipment maintenance field to develop new or reinforce existing skills.

Required Courses — 19 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
IDFC 1007	Industrial Safety Procedures	2
MCHT 1012	Blueprint for Machine Tool	3
IDSY 1170	Industrial Mechanics	4
IDSY 1190	Fluid Power Systems	4
IDSY 1195	Pumps and Piping Systems	3

DC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3

AC Course — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3

IDSY 1105	AC Circuit Analysis	3
Minimum Credit Hours for Graduation		25

Programmable Control Technician PC81

Type

Technical Certificate of Credit

The Programmable Controller Technician I certificate program offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction in basic and advanced PLCs.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLC's	4
IDSY 1220	Intermediate Industrial PLC's	4
Minimum Credit Hours for Graduation		12

Industrial Systems Course Descriptions

IDFC 1000 : Principles of Electricity I

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 4

IDFC 1005 : Principles of Electricity II

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, and introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

Credits 5

IDFC 1007 : Industrial Safety Procedures

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

Credits 2

IDFC 1011 : Direct Current I

Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

Prerequisites

[MATH 1012/MATH 1012](#)/MAT 102 or [MATH 1013/MAT 1013/MAT 103](#).

IDFC 1012 : Alternating Current I

Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

Credits 3

Prerequisites

[IDFC 1011](#) or IFC 101.

IDSY 1020 : Print Reading and Problem Solving

This course introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading and engineering specifications and applying a systematic approach to solving the problem.

Credits 3

IDSY 1100 : Basic Circuit Analysis

This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

Credits 5

IDSY 1101 : DC Circuit Analysis

This course introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; Series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

Credits 3

IDSY 1105 : AC Circuit Analysis

This course introduces alternating current concepts, theory, and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, inductance and capacitance.

Credits 3

IDSY 1110 : Industrial Motor Controls I

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

Credits 4

IDSY 1120 : Basic Industrial PLC's

This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

Credits 4

IDSY 1130 : Industrial Wiring

Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

Credits 4

IDSY 1150 : DC & AC Motors

Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

Credits 3

Prerequisites

IDFC 1011

IDFC 1012

IDSY 1160 : Mechanical Laws & Principles

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

Credits 4

IDSY 1170 : Industrial Mechanics

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

Credits 4

IDSY 1180 : Magnetic Starters & Braking

Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

Credits 3

Prerequisites

IDSY 1150

IDFC 1012

IDSY 1190 : Fluid Power Systems

This course provides instruction in the fundamentals of safely operating hydraulics and pneumatics. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and, pneumatic system principles and components.

Credits 4

IDSY 1195 : Pumps and Piping Systems

This course provides instruction in the fundamentals of installation, maintenance, and troubleshooting of pump and piping systems. Theory and practical application concepts are discussed.

Credits 3

IDSY 1210 : Industrial Motor Controls II

This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

Credits 4

IDSY 1220 : Intermediate Industrial PLC's

This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, and introduction to HMI, analog control, and troubleshooting discrete IO devices.

Credits 4

IDSY 1230 : Industrial Instrumentation

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

Credits 4

IDSY 1240 : Maintenance for Reliability

Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/predictive maintenance of industrial equipment.

Credits 4

Prerequisites

IDSY 1170

IDFC 1012

IDSY 2500 : Industrial Environmental Internship/Practicum

This course allows the student to gain real-world experience by working with a local industry in the appropriate field for a minimum of 135 hours during the term or, alternatively, an equivalent number of hours on real-world projects at the college.

Prerequisites

Instructor Approval.

Interdisciplinary Studies

Interdisciplinary Studies AF53

Type

Associate of Applied Science, AAS

The Associate of Applied Science Degree in Interdisciplinary Studies (AIS) allows customization of the program of study based on each student's academic and professional goals. The AIS requires the completion of 61 semester credit hours (21 hours of general education requirements and 40 hours distributed among one or more areas of emphasis). Areas of concentration include education, public safety, business, computer/information technology, industrial/engineering technology, and health sciences. The program curriculum may be strategically selected to build upon the student's goals and objectives. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education. A student might choose an interdisciplinary studies program if his or her specific goals and interests

cannot be met through a school's existing majors, minors, and electives.

Area I - Language Arts/ Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	ENGL 1102, SPCH 1101, ENGL 1105, or HUMM 1109	3

Area II - Social/ Behavioral Sciences — 6 Hours

* Choose 6 credit hours from the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCL 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 6 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

— Hours

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 2107	Biological Principles I	3
BIOL 2107L	Biological Principles I Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
PHYS 1110	Conceptual Physics	3
PHYS 1111L	Introductory Physics I Lab	1
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3

Area IV - Humanities and Fine Arts — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits

ARTS 1101	Art Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

Occupational Courses — 40 Hours

****Occupational courses must be selected from degree-level occupational program areas. Students should work with an academic advisor to strategically select courses to design a program that suits a specific career path.**

Minimum Credit Hours for Graduation	61

EMPL - Job Acquisition Skills

Job Acquisition Skills Course Descriptions

EMPL 1000 : Interpersonal Relations & Professional Development

Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

Credits 2

Prerequisites

Effective Summer 2024 (202416)
- Psychology will no longer be accepted for EMPL 1000.

MCHT - Machine Tool

Precision Machining and Manufacturing MTT2

Type

Diploma

The Precision Machining and Manufacturing Diploma program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Precision Machining and Manufacturing Degree/ Diploma and have the qualification of a machine tool technician.

General Education Courses — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 37 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1020	Heat Treatment & Surface Grinding	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
AMCA 2110	CNC Fundamentals	4
	Occupational Guided Electives (6 hrs)	6

Math Option — 3-6.00 Hours

* Choose one of the following options:

Item #	Name	Credits
MCHT 1013	Machine Tool Math	3
	MATH 1013 and MATH 1015 Cluster	6

Minimum Credit Hours for Graduation 45

CNC Specialist CS51

Type

Technical Certificate of Credit

The CNC Specialist Technical Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

* Hazlehurst Annex Location

Other Conditions for Admission

* Student must have completed the Machine Tool Technology diploma program or have 3-5 years' experience at the machinist level.

Required Courses — 22 Hours

Item #	Name	Credits
AMCA 2110	CNC Fundamentals	4
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	4
AMCA 2190	CAD/CAM Programming	4
	Minimum Credit Hours for Graduation	22

Metals Technician ME31

Type
Technical Certificate of Credit

The Metals Technician TCC is a series of courses that prepare a student for general knowledge of maintenance and repair of machinery by combining machine shop courses with welding courses. A student will learn to operate lathes (lathe safety, threading, tapers, bearing shafts, etc.) and milling machines (indicating vises, cutting keyways, squaring parts, etc.) as well as basic welding theory, safety and operating procedures (hand tool and power machine use, measurement, welding power sources, welding codes and standards) and advanced techniques (set up; transfer modes; wire selection; shielded gas selection) required for successful gas metal arc welding.

Required Courses — 20 Hours

Item #	Name	Credits
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1000	Introduction to Welding Technology	4
WELD 1090	Gas Metal Arc Welding	4
	Minimum Credit Hours for Graduation	20

Machine Tool Course Descriptions

MCHT 1011 : Introduction to Machine Tool

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

Credits 4

MCHT 1012 : Blueprint for Machine Tool

Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

Credits 3

MCHT 1013 : Machine Tool Math

This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

Credits 3

Prerequisites

MATH 0098

MCHT 1017 : Characteristics of Metals/Heat Treatment I

Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

Credits 4

MCHT 1020 : Heat Treatment & Surface Grinding

Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders. Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles, heat treatment of metals, surface grinders, surface grinder maintenance, surface grinder setup, surface grinder operations, and safety.

Credits 4

MCHT 1030 : Applied Measurement

This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

Credits 3

Prerequisites

MCHT 1011

MCHT 1013

MCHT 1119 : Lathe Operations I

Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1120 : Mill Operations I

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

Credits 4

Prerequisites

MCHT 1011

MCHT 1219 : Lathe Operations II

Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

Credits 4

MCHT 1220 : Mill Operations II

Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

Credits 4

MGMT - Management

Management Course Descriptions

**MGMT 1100 : Principles of
Management**

Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

Credits 3

**MGMT 1105 : Organizational
Behavior**

Provides a general knowledge of the human relations aspects of the senior-subordinate workplace environment. Topics include: employee relations principles, problem solving and decision making, leadership techniques to develop employee morale, human values and attitudes, organizational communications, interpersonal communications, and employee conflict.

Credits 3

**MGMT 1110 : Employment Rules
& Regulations**

Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

Credits 3

MGMT 1115 : Leadership

This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

Credits 3

MGMT 2120 : Labor Management Skills

Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labor-management relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and non-union grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

Credits 3**MGMT 2125 : Performance Management**

Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

Credits 3**MGMT 2130 : Employee Training & Development**

Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

Credits 3

MGMT 2135 : Management Communication Techniques

Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.
Credits 3

MAET - Marine Engine Technology

Basic Marine Engine Technician BM41

Type

Technical Certificate of Credit

The Basic Marine Engine Technician certificate program trains students for entry level employment in a marine engine repair facility as a mechanic's helper. Topics covered include marine shop safety, shop operations, marine engine fundamentals and servicing, marine fuel systems, and marine accessories.

Required Courses — 15 Hours

Item #	Name	Credits

MAET 1000	Safety, Marine Fundamentals and Precision Measuring	3
MAET 1025	Marine Engine Fundamentals and Servicing	4
MAET 1085	Marine Engine Fuel Systems	4
MAET 1150	Marine Accessories	4
Minimum Credit Hours for Graduation		15

Marine Engine Technology Course Descriptions

MAET 1000 : Safety, Marine Fundamentals and Precision Measuring

Introduces basic concepts and practices necessary for safe and effective marine shop operation as well as the use of precision measuring instruments used to accurately check various engine, gearcase, and other components used in marine engines and accessories.

Credits 3

MAET 1025 : Marine Engine Fundamentals and Servicing

Introduces basic concepts of 2-stroke and 4-stroke engine theory and service. Topics include: 2-stroke and 4-stroke engine fundamentals, cylinder head and valve train servicing, short block servicing, 2-stroke and 4-stroke engine diagnosis, and block repair methods.

Credits 4

Prerequisites

MAET 1000

MAET 1085 : Marine Engine Fuel Systems

Introduces fuel system theory, diagnosis, repair, and service for engines with carburetion systems or electronic fuel injection systems. Topics include: fuel types and additives, fuel system components, carburetor theory, oil injection systems, diagnostic and service procedures for carburetion systems, electronic fuel injection theory, electronic fuel injection components, direct fuel injection theory, and electronic fuel injection diagnostic and repair procedures.

Credits 4

Prerequisites

MAET 1000

MAET 1150 : Marine Accessories

Emphasizes rigging, propping, and the basic principles, diagnosis, service and repair of marine hydraulic trim and tilt systems. Topics include: rigging, propping, outboard midsection servicing, hydraulic system fundamentals, and trim and tilt servicing.

Credits 4

Prerequisites

MAET 1000

MKTG - Marketing

Marketing Management MM13

Type

Associate of Applied Science, AAS

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement.

Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a Marketing degree with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM3
- Entrepreneurship Specialization 8EN3
- Retail Management Specialization 8RM3

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3

HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills & Reasoning	3

Area IV - Humanities and Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3

RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 22 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Elective (3 credits +)	3

Business Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3

PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Selection — 6 Hours

* Choose two of the following courses:

Item #	Name	Credits
MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/ Practicum	3
MKTG 2300	Marketing Management	3

Digital Presentation Selection — 2-4.00 Hours

* Choose one of the following courses:

Item #	Name	Credits
MKTG 2030	Digital Publishing and Design	3
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1190	Digital Technologies in Business	2

Marketing Management Specialization 8MM3 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3

MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN3 — 12 Hours

Item #	Name	Credits
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM3 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	63

Marketing Management MM12

Type
Diploma

The Marketing program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes

required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing. Graduates of the program receive a diploma with specializations in marketing management, entrepreneurship, or retail management.

* Students must choose one of the following Specializations:

- Marketing Management Specialization 8MM2
- Entrepreneurship Specialization 8EN2
- Retail Management Specialization 8RM2

Basic Skills Courses — 8 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
	EMPL 1000 or PSYC2-3 1010	
	MATH 1011 or MATH 1012	3

Occupational Courses — 23 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2090	Marketing Research	3
	Guided Electives	3
	3+	

Technology Publishing Selection — 2 Hours

* Choose one of the following courses:

Item #	Name	Credits
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing & Presentation Applications	4
COMP 1000	Introduction to Computer Literacy	3
MKTG 2030	Digital Publishing and Design	3

Marketing Selection — 3 Hours

* Choose one of the following options:

Item #	Name	Credits
MKTG 2290	Marketing Internship/ Practicum	3
MKTG 2300	Marketing Management	3
	Guided Electives 3+	3

Regulation and Law Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ACCT 2140	Legal Environment of Business	3
MKTG 1130	Business Regulations and Compliance	3

PARA 1150	Contracts, Commercial Law, Business Organizations	3

Marketing Management Specialization 8MM2 — 12 Hours

Item #	Name	Credits
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
	Marketing Elective	3

Entrepreneurship Specialization 8EN2 — 12 Hours

Item #	Name	Credits
MKTG 2210	Entrepreneurship	6
MKTG 2010	Small Business Management	3
MKTG 2070	Buying and Merchandising	3

Retail Management Specialization 8RM2 — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
	Minimum Credit Hours for Graduation	42

Retail Merchandise Manager RMM1

Type

Technical Certificate of Credit

The Retail Merchandise Manager certificate is designed to prepare students to plan and supervise the purchase and marketing of merchandise in a broad area. In department store chains, with numerous stores, many of the buying and merchandising functions are centralized in one location. Managers decide which merchandise is best for their own stores.

Required Courses — 12 Hours

Item #	Name	Credits
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

Management Selection — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
MGMT 1100	Principles of Management	3
MKTG 2010	Small Business Management	3
	Minimum Credit Hours for Graduation	15

Small Business Marketing Manager SB51

Type

Technical Certificate of Credit

This program prepares individuals to develop and manage independent small businesses. Included are courses in marketing, management, selling, promotion, and business regulations.

Required Courses — 15 Hours

Item #	Name	Credits
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communication	3
MKTG 2010	Small Business Management	3
	Minimum Credit Hours for Graduation	15

Technical Management Specialist TMS1

Type

Technical Certificate of Credit

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise.

Required Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
MGMT 1100	Principles of Management	3
MGMT 2115	Human Resource Management	3
	Specific Occupational-Guided Electives (12 credits)	12
	MGMT 1110, MGMT 2120, or MKTG 1130	
	Minimum Credit Hours for Graduation	24

Marketing Course Descriptions

Guided Elective - Marketing

[MGMT 1100](#)

OR

[MKTG 1130](#)

[ACCT 2140](#)

[PARA 1150](#)

Credits 3

MGMT 2115 : Human Resource Management

This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development: disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.
Credits 3

MKTG 1100 : Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, and knowledge of marketing principles, marketing strategy, and marketing career paths.
Credits 3

MKTG 1130 : Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

Credits 3

MKTG 1160 : Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

Credits 3

MKTG 1161 : Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

Credits 2

MKTG 1162 : Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

Credits 4

MKTG 1163 : Computer Skills & Customer Service

Provides students with the fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

Credits 3

Prerequisites

MKTG 1162

MKTG 1164 : Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement.

Credits 2

Prerequisites

MKTG 1163

MKTG 1165 : Personal Effectiveness in Customer

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

Credits 1

Prerequisites

MKTG 1164

MKTG 1190 : Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

Credits 3

MKTG 1210 : Service Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

Credits 3

MKTG 1270 : Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

Credits 3

MKTG 1370 : Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

Credits 3

MKTG 2000 : Global Marketing

This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

Credits 3

Prerequisites

MKTG 1100

MKTG 2010 : Small Business Management

This course introduces competencies required in managing a small business. Topics include: nature of small business management, business management and organizational change, marketing strategies, employee relations, financial planning, and business assessment and growth.

Credits 3

MKTG 2030 : Digital Publishing and Design

This course covers the knowledge and skills required to use digital publishing software as well as design and create business publications, collaterals, and digital presences. Course work will include course demonstrations, laboratory exercises and projects. Topics include: digital publishing concepts, basic graphic design, publication layout, web page design, and practical digital applications.

Credits 3

Prerequisites

COMP 1000

MKTG 2060 : Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: Role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

Credits 3

MKTG 2070 : Buying and Merchandising

Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchandising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies.

Credits 3

MKTG 2090 : Marketing Research

This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

Credits 3

Prerequisites

MKTG 1100

MKTG 2160 : Advanced Selling

This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training, sales force development, and career paths in professional selling.

Credits 3

Prerequisites

MKTG 1160

MKTG 2210 : Entrepreneurship

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, and financing, developing a business plan, and entrepreneurial ethics and social responsibility.

Credits 6

MKTG 2270 : Retail Operations Management

This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

Credits 3

MKTG 2290 : Marketing Internship/Practicum

This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development.

Credits 3

MKTG 2300 : Marketing Management

This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

Credits 3

Prerequisites

MKTG 1100

MATH - Mathematics

Mathematics Course Descriptions

MATH 0090 : Learning Support Math I

This course uses the modular approach to emphasize in-depth arithmetic skills, basic and intermediate algebra skills. Topics include number theory, whole numbers, fractions, decimals, percents, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, polynomial factoring, inequalities, rational expressions and equations, linear graphs, slope, systems of equations, radical expressions and equations, and quadratic equations, and applications involving previously listed topics. Students progress at their own pace to master each module.

Credits 3

Prerequisites

NextGen ACCUPLACER arithmetic score of less than 229

Corequisites

MATH 1012

MATH 0098 : Elementary Algebra

Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

Credits 3

Prerequisites

Appropriate entrance arithmetic or algebra placement test score.

NextGen ACCUPLACER

arithmetic score of less than 229

MATH 1012 : Foundations of Mathematics

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229.

MATH 1013 : Algebraic Concepts

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Arithmetic score of 229 &

minimum NextGen ACCUPLACER Algebra score of 220.

MATH 1015 : Geometry and Trigonometry

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

Credits 3

Prerequisites

MATH 1111

MATH 1013

MATH 1017 : Trigonometry

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

Credits 3

Prerequisites

MATH 1013

MATH 1100 : Quantitative Skills & Reasoning

Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, and mathematics of finance.

Credits 3

Prerequisites

minimum ACCUPLACER Algebra score of 245.

MATH 1101 : Mathematical Modeling

Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1103 : Quantitative Skills & Reasoning

This course focuses on quantitative skills and reasoning in the context of experiences that students will be likely to encounter. The course emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Students will use appropriate technology to enhance mathematical thinking and understanding. Topics covered in this course include: sets and set operations, logic, basic probability, data analysis, linear models, quadratic models, exponential and logarithmic models, geometry, and financial management.

Credits 3

Prerequisites

minimum Next Gen ACCUPLACER Algebra score of 245.

Corequisites

None.

MATH 1111 : College Algebra

Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1112 : College Trigonometry

Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

Credits 3

Prerequisites

MATH 1111

MATH 1113 : Precalculus

Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay

Credits 3

Prerequisites

[MATH 1111](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1127 : Introduction to Statistics

Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1131 : Calculus I

Topics include the study of limits and continuity, derivatives, and integrals of functions of one variable. Applications are incorporated from a variety of disciplines. Algebraic, trigonometric, exponential, and logarithmic functions are studied.

Credits 4

Prerequisites

[MATH 1113](#) or minimum NextGen ACCUPLACER Algebra score of 245.

MATH 1132 : Calculus II

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, polar graphs, and power series.

Credits 4

Prerequisites

MATH 1131

MATH 1133 : Calculus III

This course includes the study of functions defined on regions in two or three dimensional space and that have values in one, two, or three dimensional space. Topics include partial derivatives, vector fields and analysis, multiple integrals, and applications of these topics.

Credits 4

Prerequisites

MATH 1132

MEGT - Mechanical Engineering

Mechanical Engineering Course Descriptions

**MEGT 1010 : Manufacturing
Process**

This course introduces industrial manufacturing processes that employ processes for material shaping, joining, machining and assembly to the student. Topics include: casting, shaping and molding of metals, ceramics and polymers; particulate processing of metals and ceramics, metal forming, machining, sheet metal working, joining and assembling, surface treatment, and manufacturing design considerations. Emphasis is provided on raw materials, quality, and costs of finished products. The course includes lab exercises that demonstrate the applications of the topics covered in actual manufacturing processes.

Credits 3

Prerequisites

ENGT 1000

MCHT 1013

**MEGT 1321 : Machining and
Welding**

An introduction to machining and welding technology. This course will include emphasis of use and operation of selected machinery, various machining operations, selected welding processes and precision measuring instruments to be combined with laboratory projects and safety. Topics will include industrial safety and health practices; welding quality; use of cutting and grinding tools; introduction to welding terms and symbols; shielded metal arc welding (SMAW); gas metal arc welding (GMAW); gas tungsten arc welding (GTAW); basic machining operations; and precision measuring instruments.

Credits 2

Prerequisites

MEGT 1010

MCHT 1013

MEGT 2030 : Statics

This course introduces the student to the study of forces acting on objects and their effects on a body at rest or at constant velocity. Static principles are applied in analyzing structural systems. Topics include: vectors, resultants, equilibrium of force systems, free body diagrams (FBD), analysis of trusses and frames, distributed loading and geometric properties of areas. Emphasis is placed on bodies at rest in both 2 dimensions and 3 dimensions.

Credits 3

Prerequisites

ENGT 1000

MATH 1113

MEGT 2080 : Strength of Materials

This course studies the behavior of materials when subjected to different loadings and constraints. Topics include: stress, strain, material properties, properties of cross sectional areas, bending and buckling of members, beam and column analysis, torsion and combined loading. Emphasis is provided on predicting material behavior in various mechanical applications and utilizing fundamental analysis techniques to determine stress in solids under tension, compression, torsion and/or shear. The course includes hands on laboratory exercises such as evaluating beam deflection and the thermal expansion of various metals.

Credits 4

Prerequisites

MEGT 2030

MAST - Medical Assisting

Medical Assisting MA22

Type

Diploma

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting diploma.

Program Accreditation

Medical Assisting, Waycross Campus, is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater FL 33756
Phone 727-210-2350
www.caahep.org

The minimum expectation goal is to prepare competent entry-level medical assistants in the cognitive, psychomotor, and affective learning domains. All domains are taught and assessed as outlined by the Medical Assisting Education Review Board (MAERB).

Certification Information

Graduates of the Waycross campus program are eligible to take the Certified Medical Assistant (CMA) certification exam offered by the Certifying Board of the American Association of Medical Assistants (AAMA) as well as the RMA via the American Medical Technologist.

Graduates of the Golden Isles campus program are eligible to take the Registered Medical Assistant (RMA) certification exam via the American Medical Technologist (AMT) or the National Certified Medical Assistant certification exam via the National Center for Competency Testing (NCCT).

MAERB Outcomes

Under the MAERB Outcomes heading it would need to state, "According to the 2024 Medical Assisting Education Review Board (MAERB) Annual Report, the

Medical Assisting program at Coastal Pines Technical College has an average job placement rate of 84.62%, retention rate of 79.25%, and an average exam passage rate of 83.3% for the five years 2019 – 2023."

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Entrance Requirements

Completion of [Health Care Assistant HA21](#)

Competitive Admissions Program Application:

[Medical Assisting Application](#)

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 44 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2

MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1080	Medical Assisting Skills	4
MAST 1120	Human Disease	3
MAST 1010	Legal & Ethical Concerns	2
MAST 1090	Medical Assisting Skills II	4
MAST 1110	Administrative Practice Management	3
MAST 1170	Medical Assisting Externship	4
MAST 1180	Medical Assisting Seminar	4
Minimum Credit Hours for Graduation		53

Medical Assisting Course Descriptions

MAST 1010 : Legal & Ethical Concerns

Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant's role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.
Credits 2

MAST 1030 : Pharmacology in the Medical Office

Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.
Credits 4
Prerequisites
Program Admission, MATH 1012.

MAST 1060 : Medical Office Procedures

Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, electronic records, and professional communication.
Credits 4

MAST 1080 : Medical Assisting Skills

Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures, respiratory evaluations and electrocardiography.
Credits 4
Prerequisites
Program admission, ALHS 1011, ALHS 1090.

MAST 1090 : Medical Assisting Skills II

Further student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/ risk management; urinalysis; venipuncture; hematology and chemistry evaluations; applied microbiology; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records and nutrition.
Credits 4
Prerequisites
Program Admission, ALHS 1011 and ALHS 1090

MAST 1100 : Medical Insurance Management

Emphasizes essential skills required to file insurance claims within the medical practice. Provides information on types of third party plans, managed care policies and procedures, and insurance coding conventions. Topics include: managed care, reimbursement, and coding.

Credits 2**Prerequisites**

ALHS 1011

ALHS 1090

Program Admission

MAST 1110 : Administrative Practice Management

Emphasizes essential skills required for the medical practice in the areas of computers and application of computer skills, electronic health records, accounting procedures, and practice management software. Topics include: accounting procedures and application software.

Credits 3**Prerequisites**

ALHS 1011

ALHS 1090

MAST 1120 : Human Disease

Provides review of anatomy and physiology per body system and fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: review of anatomy and physiology and diseases of the body systems

Credits 3**Prerequisites**

ALHS 1011

ALHS 1090

Program admission

MAST 1170 : Medical Assisting Externship

Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Credits 4**Prerequisites**

Program admission and completion of all Medical Assisting Classes.

Corequisites

MAST 1180

MAST 1180 : Medical Assisting Seminar

Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, completing a job application, job interviews, follow-up letter/call, letters of resignation and review of program competencies for employment and certification.

Credits 4**Prerequisites**

Program admission and completion of all Medical Assisting Classes except [MAST 1170](#).

Corequisites

MAST 1170

Naval Apprentice

Naval Electrician Apprentice EW11

Type

Technical Certificate of Credit

This TCC provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC builds on the knowledge and skills learned in the naval Maintenance Apprentice TCC. This TCC is designed as a specialty area for students working at Trident Refit Facility in Camden County. Upon completion of this TCC, students are eligible to move into one of the specialty areas in the Industrial Systems Technology diploma group.

Other Conditions for Admission

Must have completed the Naval Maintenance Apprentice TCC and be a current employee of Trident Refit Facility.

Required Courses — 12 Hours

Item #	Name	Credits
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	4

AC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ELTR 1020	Alternating Current Fundamentals	3
IDFC 1012	Alternating Current I	3
IDSY 1105	AC Circuit Analysis	3

DC Course — 3 Hours

* Choose one of the following:

Item #	Name	Credits
IDFC 1011	Direct Current I	3
IDSY 1101	DC Circuit Analysis	3
	Minimum Credit Hours for Graduation	18

Naval Machine Tool Apprentice NM51

Type

Technical Certificate of Credit

— 28 Hours

This TCC program provides the student with knowledge and skills to enter the job market in a variety of industrial settings. This TCC is designed as a specialty area for students working at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool Technology or Industrial Systems Technology.

Item #	Name	Credits
IDSY 1190	Fluid Power Systems	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1017	Characteristics of Metals/Heat Treatment I	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
AMCA 2110	CNC Fundamentals	4
DFTG 1101	CAD Fundamentals	4

Minimum Credit Hours for Graduation 28

Naval Maintenance Apprentice NM11

Type

Technical Certificate of Credit

This TCC is designed as a specialty area for students employed at Trident Refit Facility. Upon completion of this TCC, students are eligible to move into other specialty diploma areas such as Machine Tool or Industrial Systems Technology.

Other Conditions for Admission

Student must be employed at Trident Refit Facility as a Naval Apprentice.

Required Courses — 26 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
ENGL 1105	Workplace and Technical Communications	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MGMT 1115	Leadership	3
WELD 1030	Blueprint Reading for Welding Technology	4
	PHYS 1111 (+ lab) or 4 IDSY 1170 or DFTG 2010	
	Occupational Elective (3 hrs)	3
	Minimum Credit Hours for Graduation	26

NEUT - Neuromuscular Massage Therapy

Neuromuscular Massage Therapist NT12 (No Longer Offered)

Type

Diploma

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEX) offered by the Federation of State Massage Therapy Boards and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular

Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

- Golden Isles - Day Cohort Program - Accepting Students Yearly in Fall Semester

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
	MATH 1011 or MATH 1012	3

Occupational Courses — 48 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
NEUT 1001	Musculoskeletal Anatomy & Physiology I	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120 4

NEUT 1010	Neural Science	120	4
NEUT 1020	Pathology/Neuromuscular Therapy	3	
NEUT 1030	Neuromuscular Therapy Fundamentals	3	
NEUT 1050	Technique and Theory I	5	
NEUT 1060	Clinic I	2	
NEUT 1080	Techniques and Theory III	90	3
NEUT 1081	Techniques and Theory III	3	
NEUT 1100	Adjunctive Modalities	3	
NEUT 1110	Licensure Review	3	
NEUT 1120	Clinic II	60	2
NEUT 1230	Professional Leadership for Neuromuscular Therapy	2	
	Minimum Credit Hours for Graduation	57	

Neuromuscular Massage Therapist NM21

Type

Technical Certificate of Credit

The Neuromuscular Massage Therapy TCC program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis,

neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy TCC, which qualifies them to take the Massage and Bodywork Licensing Examination (MBLEx) offered by the Federation of State Massage Therapy Board and apply for Georgia Licensure through The Georgia Board of Massage Therapy.

Program Approval

The Neuromuscular Massage Therapist program is a Georgia Board of Massage Therapy Recognized Massage Therapy Program. The Neuromuscular Massage Therapist program is also recognized by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as an Assigned School.

Licensure Information

Graduates of the program are eligible to sit for the Massage and Bodywork Licensing Examination (MBLEx) required to obtain licensure as a Licensed Massage Therapist in Georgia.

Location Notes:

Golden Isles - Day Cohort Program - Accepting Students Yearly Fall Semester

Occupational Courses — 36 Hours

Item #	Name	Clock Hours	Credits
THMT 1001	Fundamentals of Massage	90	3
THMT 1002	Technique and Theory I	120	4
THMT 1003	Anatomy and Physiology I	90	3

THMT 1004	Anatomy and Physiology II	90	3
THMT 1006	Pathology for Massage Therapist	60	2
THMT 1101	Fundamentals of Massage II	120	4
THMT 1102	Technique and Theory II	120	4
NEUT 1005	Musculoskeletal Anatomy & Physiology II	120	4
NEUT 1010	Neural Science	120	4
NEUT 1080	Techniques and Theory III	90	3
NEUT 1120	Clinic II	60	2
Minimum Credit Hours for Graduation		36	

Neuromuscular Massage Therapy Course Descriptions

NEUT 1001 : Musculoskeletal Anatomy & Physiology I

This is the first of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Credits 4

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1005 : Musculoskeletal Anatomy & Physiology II

This is the second of two courses which provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

Clock Hours 120

Credits 4

Prerequisites

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1010 : Neural Science

This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine system

Clock Hours 120

Credits 4

Prerequisites

NEUT 1030

NEUT 1050

NEUT 1060

NEUT 1080

NEUT 1020 : Pathology/ Neuromuscular Therapy

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and NMT Foundational Platform.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1030 : Neuromuscular Therapy Fundamentals

Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Credits 3

Prerequisites

ALHS 1090

ALHS 1011

NEUT 1050 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self-care.

Credits 5**Prerequisites**

ALHS 1090

ALHS 1011

NEUT 1060 : Clinic I

Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self-care.

Credits 2**Prerequisites**

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1080 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Clock Hours 90**Credits 3****Prerequisites**

NEUT 1001

NEUT 1020

NEUT 1030

NEUT 1050

NEUT 1081 : Techniques and Theory III

This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self-care.

Credits 3**Prerequisites**

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1100 : Adjunctive Modalities

This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Credits 3**Prerequisites**

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1110 : Licensure Review

This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self-directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

Credits 3**Prerequisites**

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1120 : Clinic II

Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self-care.

Clock Hours 60

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

NEUT 1230 : Professional Leadership for Neuromuscular Therapy

This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

Credits 2

Prerequisites

NEUT 1005

NEUT 1010

NEUT 1060

NEUT 1080

THMT 1001 : Fundamentals of Massage

This course provides students with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a massage therapist. This course prepares students for practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

Clock Hours 90

Credits 3

THMT 1002 : Technique and Theory I

This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session.

Topics include: Client Assessment, Reassessment, and Treatment Planning Assessment, Preceptor Shadowing, Community Outreach, Self-Care.

Clock Hours 120

Credits 4

Prerequisites

Program Admission

THMT 1003 : Anatomy and Physiology I

This course provides an entry level understanding of human anatomy so as to enable the student to better assess and treat client conditions. Topics the Sciences: Human Anatomy, The Chemical Level, The Cellular Level, The Tissue Level, Circulatory/Cardiovascular, Digestive System, Endocrine System, Immune System, Lymphatic System, Nervous System, Reproductive System, Respiratory System, Special Senses, Urinary System.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

THMT 1004 : Anatomy and Physiology II

This course provides an advanced understanding of musculoskeletal anatomy, enabling the students to assess and treat client conditions. Topics include Integumentary System, Skeletal System, Muscular System, Kinesiology, and Biomechanics.

Clock Hours 90

Credits 3

Prerequisites

Program Admission

**THMT 1006 : Pathology for
Massage Therapist**

This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; critical reading; and foundational platform.

Clock Hours 60**Credits 2****Prerequisites**

Program Admission

**THMT 1101 : Fundamentals of
Massage II**

This course provides an overview of other adjunctive modalities necessary for further supervised study and training required for responsible therapy. Topics include pregnancy massage, lymphatic drainage, advanced assessment techniques, muscle lengthening techniques, thermotherapy, passive and active engagement, positional release techniques, myofascial release overview, and critical reading.

Clock Hours 120**Credits 4****Prerequisites**

Program Admission

**THMT 1102 : Technique and
Theory II**

This course prepares students to develop professional leadership skills and maintain a successful practice as a Massage Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization. Topics include networking, business promotion, business management, start-up plan portfolio, financial management, State (Georgia) law, Local Law, and Professional Ethics.

Clock Hours 120**Credits 4****Prerequisites**

Program Admission

NAST - Nurse Aide

Nurse Aide Course Descriptions

**NAST 1100 : Nurse Aide
Fundamentals**

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents/patient's condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

NAST 2100 : Nurse Aide Accelerated

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 7**Corequisites**

ALHS 1040

ALHS 1090

NAST 2105 : Nurse Aide Fast Track

Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury

Credits 3

RNSG - Nursing (ASN)

Associate of Science, Nursing NH73**Type**

Associate of Science, AS

Registered nurses fulfill a variety of job duties. RN job functions include performing diagnostic tests and analyzing results, administering medications, operating medical equipment, recording patients' symptoms

and medical histories, and assisting with patient rehabilitation and follow-up. Currently, Georgia is experiencing a huge shortage in Nursing and Southern Georgia is no exception. Students who successfully complete the ASN Program with Coastal Pines Technical College will have an excellent opportunity to enter the workforce in the area that they live as well as meet the workforce demands in the medical field.

2024 Program Outcomes

NCLEX Pass Rate: 93.1%

Combined 1st Time Test Takers and Repeaters

Program Completion Rate: 100% (29/29)

Employment Rate: 93% (27/29)

Accreditation:

The Associate nursing program at Coastal Pines Technical College at the Jesup Campus, 1777 W. Cherry Street located in Jesup, Georgia is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate nursing program is Initial Accreditation.

Links:[Program Handbook](#)[ASN Competitive Admissions Guide](#)**Competitive Admissions Program Application:**[ASN Program Application](#)

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Choose one of the following
Math courses:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

Area IV - Humanities and Fine Arts — 3 Hours

* Complete at least one of the
following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
ENGL 2110	World Literature	3

ENGL 2130	American Literature	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

General Education Core Electives — 3 Hours

* Complete at least one of the
following (not already taken in
Area IV):

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 1102	Literature and Composition	3
HUMN 1101	Introduction to Humanities	3
MATH 1113	Precalculus	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
RELG 1101	World Religion	3
HIST 1111	World History I	3

Biology Core — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 40 Hours

Item #	Name	Credits
RNSG 2021	Fundamentals of Nursing	7
RNSG 2022	Mental Health Nursing	5
RNSG 2023	Medical Surgical Nursing I	6
RNSG 2024	Pharmacology in Nursing	3
RNSG 2029	Medical Surgical Nursing II	6
RNSG 2031	Maternal/Pediatric Nursing	7
RNSG 2033	Medical Surgical Nursing III	6
	Minimum Credit Hours for Graduation	67

Nursing (ASN)

Course Descriptions

RNSG 2021 : Fundamentals of Nursing

This course is designed to introduce students to the fundamental concepts of nursing across the lifespan, along with the application of basic skills related to health history collection and physical assessment of all body systems. The course includes the consideration of nutritional, bio/psychosocial, developmental, cultural and spiritual needs, and transitional changes related to variations in health status of the client. The establishment and maintenance of a therapeutic nurse/client relationship is emphasized. Critical thinking skills are developed through activities and exercises presented in the classroom and skills lab. With a focus on patient-centered care, the nursing process will be utilized to identify and provide the building blocks of nursing care in a variety of healthcare settings. Emphasis is placed on developing skills needed to provide safety, minimizing the risk of harm to patients and providers, and evidence-based practice. Guided learning experiences in the skills and computer laboratories will assist the student in making a learning transition. The transition occurs as the student moves from basic skills to more advanced skills. Concepts presented include beginning teamwork and collaboration, documentation, patient safety, informatics, physical assessment, infection control, patient education, and the Nursing Process. Inpatient and outpatient clinical rotations will provide opportunities for the student to achieve course competencies. The course provides opportunities for the student to acquire an adequate knowledge utilizing understanding from the biophysical sciences, humanities,

growth and development, problem solving abilities, critical thinking and the nursing process.

Credits 7

Prerequisites

Program Admission.

Corequisites

RNSG 2024

RNSG 2022 : Mental Health Nursing

This course will provide the student with an opportunity to provide patient-centered care by exploring and applying the conceptual basis for professional nursing with clients in the mental health field. With a focus on psychiatric nursing services to individuals, within the context of their families, with an emphasis on teamwork and collaboration, health patterns, evidence-based practice, safety, ethics, and role development, supervised inpatient and outpatient clinical rotations will provide the opportunities for the students to achieve the course competencies. This course provides opportunities for the student to acquire an adequate knowledge utilizing evidence-based practice from the biophysical sciences, humanities, growth and development, problem solving abilities and the nursing process. This course will explore pharmacology, cultural diversity, nutrition and the legal and ethical aspects of mental health nursing.

Credits 5

Prerequisites

RNSG 2021

RNSG 2024

Corequisites

RNSG 2023

RNSG 2023 : Medical Surgical Nursing I

This course is designed to prepare associate degree nursing students to provide nursing care unitizing concepts and skills introduced in the Fundamentals course (RNSG 2020). Nursing care that promotes healthy transitions for clients experiencing variations of health status related to gastrointestinal, respiratory, musculoskeletal, neurological, cardiovascular, and psychosocial functions is included. Special consideration is given to the care of the elderly and clients during the operative period. Critical thinking skills are unitized to meet the bio/ psychosocial, developmental, cultural, and spiritual needs of the client. Emphasis is placed on the application of the roles of associate degree nursing practice.

Credits 6**Prerequisites**

RNSG 2024

RNSG 2021

Corequisites

RNSG 2022

RNSG 2024 : Pharmacology in Nursing

This course focuses on the information required to safely administer drugs and monitor the effects of drug therapy. Emphasis is placed on dosage calculations and principles of pharmacology including drug actions, interactions, and nursing implications for broad classifications of medications. Students are expected to utilize the nursing process and critical thinking in the administration of prescribed medications, taking a medication history, and teaching patients about medications in a simulated setting prior to administering medications in a variety of health care settings.

Credits 3**Prerequisites**

Program Admission

Corequisites

RNSG 2021

RNSG 2029 : Medical Surgical Nursing II

Medical Surgical II course focuses on the care of clients with critical care/acute/chronic/complex needs and problems related to health transitions in cardiac, renal, gastrointestinal, neurological, endocrine, and immunological systems across the life span. Emphasis in this course is placed on the refinement of assessment; care planning; critical thinking and decision making; communication; and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 6**Prerequisites**

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2031

RNSG 2031 : Maternal/Pediatric Nursing

Maternal child course is designed to prepare associate degree nursing students to provide care to mothers and children with an emphasis on the refinement of assessments, care planning, critical thinking and decision making, communication, and nursing skills appropriate with the level of the associate degree-nursing student.

Credits 7**Prerequisites**

RNSG 2021

RNSG 2022

RNSG 2023

RNSG 2024

Corequisites

RNSG 2029

RNSG 2033 : Medical Surgical Nursing III

Medical Surgical III Capstone Course will challenge students to synthesize and incorporate knowledge gained in the nursing profession and roles and responsibilities related to associate degree nursing. The student is expected to apply knowledge gained through the ASN program to the care of diverse clients in various practice settings. Information gained from historical perspective as well as current trends/issues in nursing will be utilized throughout the course. Emphasis is placed on ensuring the transition from student to graduate nurse via actual Hospital and Simulation Hospital, preceptorships and opportunities for leadership. These reality-based practice experiences will allow the student opportunity to provide and manage care while serving in the role of team member and team leader. Students will provide care to clients experiencing complex, acute, and emergency variations in health status related to the pathophysiological changes that occur with burns, organ failure, organ transplants, end-of-life issues, and disaster situations. The student will demonstrate critical thinking skills; utilize the principles of delegation; and exhibit communication and collaboration techniques in the management of a client caseload.

Credits 6

Prerequisites

RNSG 2021
RNSG 2022
RNSG 2023
RNSG 2024
RNSG 2029
RNSG 2031

PARA - Paralegal Studies

Paralegal Studies PS13

Type

Associate of Applied Science, AAS

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence preparation; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Associate of Applied Technology degree.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis, reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Area I - Language Arts/ Communications — 6 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
SPCH 1101	Public Speaking	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCL 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

MATH 1101, 1103, 3
or 1111

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Occupational Courses — 42 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3

PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1110	Legal Research & Writing II	3
PARA 1125	Criminal Law and Procedure	3
PARA 1140	Tort Law	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1120	Real Estate Law	3
PARA 1130	Civil Litigation	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1145	Law Office Management	3
	PARA 2200 or PARA6 2210	

Guided Electives — 9 Hours

* Choose 9 credits from the following courses:

Item #	Name	Credits
PARA 2215	Paralegal Internship II	6
PARA 1205	Constitutional Law	3
PARA 1210	Legal & Policy Issues in Healthcare	3
PARA 2205	Advanced Legal Research & Writing	3
PARA 1215	Administrative Law	3
ENGL 1105	Workplace and Technical Communications	3
PARA 1200	Bankruptcy/ Debtor-Creditor Relations	3

Minimum Credit 69
Hours for
Graduation

Paralegal Studies PS12

Type
Diploma

The Paralegal Studies program is a sequence of courses that prepares students for positions in the paralegal profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; research state and federal law; legal correspondence preparation; family law matters; criminal law and procedure, and tort law. The program of study emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services. Program graduates receive a Paralegal Studies Diploma.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

General Education Courses — 8-9 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3
	MATH 1101, 1103, or 1111	3
	EMPL 1000, PSYC 1010, or PSYC 1101	2-3

Occupational Courses — 24 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1105	Legal Research & Writing I	3
PARA 1145	Law Office Management	3
PARA 1140	Tort Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1110	Legal Research & Writing II	3

Paralegal Selection — 6 Hours

* Choose **two** of the following courses:

Item #	Name	Credits
PARA 1200	Bankruptcy/ Debtor-Creditor Relations	3
PARA 1135	Wills, Trusts, Probate and Administration	3
PARA 1205	Constitutional Law	3

PARA 1210	Legal & Policy Issues in Healthcare	3
	Minimum Credit Hours for Graduation	38

Paralegal Fundamentals PF21

Type

Technical Certificate of Credit

The Paralegal Fundamentals program is a sequence of courses that prepares students for entry level positions in the law firm. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The knowledge and skills emphasized in this program include ethical obligations; analysis of state and federal law; legal correspondence preparation; criminal law and procedure; and family law. The program emphasizes opportunities that provide students with specialized legal knowledge and skills required to aid lawyers in the delivery of legal services.

Unauthorized Practice of Law

The goal of the Paralegal Studies Program is to train students in a variety of legal practice areas, analysis and reasoning and effective communication with the students successfully adapting these skills to professional legal environments. Paralegals shall not engage in the unauthorized practice of law as proscribed by the Official Code of Georgia §15-19-51 and must work under the supervision and direction of an attorney in good standing with the State Bar of Georgia.

Required Courses — 12 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
PARA 1100	Introduction to Law and Ethics	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
	Minimum Credit Hours for Graduation	12

Paralegal Studies Post-Baccalaureate Certificate PS71

Type

Technical Certificate of Credit

The Paralegal Studies Post-Baccalaureate Certificate (PS71) program provides learning opportunities to help develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement in the legal field. This TCC was developed for students who currently hold a four-year degree in any major. The knowledge and skills emphasized in this program include ethical obligations; research in state and federal law; legal correspondence and preparation of legal documents; family law matters; basic concepts of real property law, criminal law and procedure, civil litigation, tort law, and substantive contract law; and wills, trusts, and probate.

Required Courses — 30 Hours

Item #	Name	Credits

PARA 1100	Introduction to Law and Ethics	3
PARA 1130	Civil Litigation	3
PARA 1105	Legal Research & Writing I	3
PARA 1115	Family Law	3
PARA 1125	Criminal Law and Procedure	3
PARA 1150	Contracts, Commercial Law, Business Organizations	3
PARA 1110	Legal Research & Writing II	3
PARA 1120	Real Estate Law	3
	PARA XXXX-Paralegal Electives (3 credits)	3
	PARA XXXX-Paralegal Electives (3 credits)	3
	Minimum Credit Hours for Graduation	30

Paralegal Studies Course Descriptions

PARA 1100 : Introduction to Law and Ethics

Emphasizes the American legal system, the role of the lawyer and legal assistant within that system, and the ethical obligations imposed upon attorneys and legal assistants. Topics include: survey of American jurisprudence, code of professional responsibility and ethics overview, and introduction to areas of law and legal vocabulary.

Credits 3

Prerequisites

None.

Corequisites

None.

PARA 1105 : Legal Research & Writing I

Introduces the student to the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will utilize both print and electronic research resources. Focuses on the application and reinforcement of basic writing skills, familiarizes the student with types of writing typically engaged in by lawyers and legal assistants, and prepares the student for legal writing tasks. The student learns to write business letters as well as advisory documents. Topics include: legal analysis and legal correspondence and composition

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#).

PARA 1110 : Legal Research & Writing II

Builds on competencies acquired in PARA 1105 and continues the process of locating statutory, judicial, administrative and secondary sources on both a state and federal level. The student will conduct a wider range of research in both print and electronic research resources. Emphasis will be placed on preparation of legal documents. Criminal case documents will be examined, but most of the emphasis will be on civil matters. The student will be presented factual scenarios, and utilizing these facts, research and develop a case from intake to trial.

Credits 3

Prerequisites

[ENGL 1101](#) and [PARA 1100](#) and [PARA 1105](#).

PARA 1115 : Family Law

Introduces the student to the issues which may arise in family law cases and to the role of the paralegal in assisting the attorney in the development and presentation of such cases. Topics include: issues associated with client and witness interviews, marriage validity and dissolution, litigation support in family law matters, issues concerning children, special matters in family law, and attorney and paralegal ethical obligations.

Credits 3

Corequisites

PARA 1100

PARA 1120 : Real Estate Law

Introduces the student to the basic concepts of real property law as they pertain to common types of real estate transactions. Additionally, emphasis will be placed on practical skills such as document preparation and title examination. Topics include: real estate contracts, plat reading and legal descriptions, types and purposes of deeds, title searches, common real estate mortgages and documentation, real estate closing and closing statements, recordation statutes and requirements, and elements of the lease.

Credits 3

Corequisites

PARA 1100

PARA 1125 : Criminal Law and Procedure

Introduces the student to the basic concepts of substantive criminal law and its procedural aspects with an emphasis on the constitutionally protected rights of the accused in the criminal justice system. Topics include: substantive criminal law and procedure and criminal litigation support.

Credits 3

Corequisites

PARA 1100

PARA 1130 : Civil Litigation

Emphasizes competencies and concepts of civil litigation in both federal and state courts. Topics include: federal and state litigation; trial and pretrial proceedings; litigation ethics; and litigation documents, exhibits, investigations, and interviews.

Credits 3

Prerequisites

ENGL 1101

PARA 1100

None.

Corequisites

None.

PARA 1135 : Wills, Trusts, Probate and Administration

Provides a general framework of the substantive theory of wills, trusts, and estates. Topics include: wills, trusts, and powers of attorney; probate of wills and administration of estates; document preparation for other probate proceedings; general jurisdiction of the probate court; terminology of wills and estate practice; client interviews; and document preparation.

Credits 3

Corequisites

PARA 1100

PARA 1140 : Tort Law

Introduces the student to the basic concepts of substantive tort law. Topics include: concepts of intentional torts, negligence and product liability; causation and liability concepts; damages and defenses; and special tort actions and immunities.

Credits 3

Corequisites

PARA 1100

PARA 1145 : Law Office Management

Introduces the student to common forms of law practice. The student will be exposed to methods of billing and time-keeping, automation in the law office, the law office library, the appropriate role of support staff in the law office, and ethical concerns relevant to law office management. Topics include: forms of law practice and insurance needs, support systems, support staff, and ethical responsibilities.

Credits 3

Corequisites

PARA 1100

PARA 1150 : Contracts, Commercial Law, Business Organizations

Introduces the student to the basic concepts of legal rules commonly applicable in commercial settings, to the basic concepts of substantive contract law and to the formulation and operation of sole proprietorships, general partnerships, limited partnerships, and corporations. Additionally, the course explores the basic concepts of agency law. Topics include Constitutional law and its impact on business, the essential elements of a contract and related legal principles and the Uniform Commercial Code, sole proprietorships, partnerships, and professional associations and other business organizations, corporations and tax implications of different organizations

Credits 3

Corequisites

PARA 1100

PARA 1200 : Bankruptcy/Debtor-Creditor Relations

Introduces the student to the purpose and application of the Federal Bankruptcy Code and Rules, as well as applicable state law related to bankruptcy and debtor-creditor issues. Topics include: the Bankruptcy Code and Rules, Bankruptcy Court procedures, the preparation of bankruptcy forms and documents, state law workouts and collection, and the role of the paralegal in a bankruptcy practice.

Credits 3

Prerequisites

PARA 1100

PARA 1205 : Constitutional Law

Explains the major legal principles and concepts of the U.S. Constitution including governmental powers and structure, and civil liberties. Additionally, this course includes an exploration of the history of the Constitution and case law interpreting it.

Credits 3

Corequisites

PARA 1100

PARA 1210 : Legal & Policy Issues in Healthcare

Provide an overview of the legal issues involved in the delivery of healthcare and the issues relating to Elder Law. Students will recognize the fundamentals of the healthcare treatment relationship, liability issues, patient care decisions and the human condition of sickness. They will explore the complexities of health care financing, health care access, governmental regulations and privacy issues. Topics will also include access to care, informed consent, patient care decisions, the doctor-patient relationship, end-of-life decision making, legal problems of the elderly, law and mental health, AIDS and the law and the privatization of health care facilities.

Credits 3**Corequisites**

PARA 1100

PARA 1215 : Administrative Law

Introduces the student to the basic concepts of administrative law including the legislative process related to enabling the agency. The Administrative Procedure Act (federal and state) is covered. Topics also include agency discretion, due process, delegation, rulemaking, investigation, information collection, informal proceeding, hearings, and judicial review. Because paralegals are permitted to represent individuals in some agency proceedings (e.g., social security, unemployment, etc.), the students are introduced to the various aspects of such representation.

Credits 3**Corequisites**

PARA 1100

PARA 2200 : Paralegal Practicum

Focuses on the application and reinforcement of paralegal skills and employability principles to further professional development through a practicum with simulated work experiences.

Credits 6**Prerequisites**

[PARA 1100](#), [PARA 1115](#), [PARA 1105](#), [PARA 1125](#), [PARA 1140](#), [PARA 1150](#), [PARA 1120](#), [PARA 1130](#), [PARA 1135](#), and [PARA 1145](#).

PARA 2205 : Advanced Legal Research & Writing

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skill. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

Credits 3**Prerequisites**

[ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2210 : Paralegal Internship I

Focuses on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development.

Credits 6**Prerequisites**

With Advisor Approval: [ENGL 1101](#), [PARA 1100](#), [PARA 1105](#), and [PARA 1110](#).

PARA 2215 : Paralegal Internship II

This course continues the focus on the application and reinforcement of paralegal skills in an actual workplace environment, or at the discretion of the instructor, in a school practicum with simulated work experiences. Realistic work situations are used to provide students with in-sights into paralegal applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of paralegal skills in a workplace setting, and professional development

Credits 6**Prerequisites**

Must be in last semester of program. With advisor approval, may take concurrently with last semester courses.

EMSP - Paramedicine

EMS Professions EP12**Type**

Diploma

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation.

Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Program Approval

The EMS Professions program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of the EMS Professions diploma, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST).

<http://ems.ga.gov/>

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

To complete the AEMT portion: Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma

(SOEMST) EMT-B to EMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, AND EMSP 1160.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, and Jesup

General Education Courses — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 33 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1

EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
Minimum Credit Hours for Graduation		42

Paramedicine PT12

Type
Diploma

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found in an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic Diploma Program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/ AEMT levels to a paramedic level. Successful completion of the

program allows the graduate to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the Georgia Office of Emergency Medical Service and Trauma as a paramedic. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Minimum Expectation:

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Program Approval

The Paramedicine program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services, and Trauma.

Program Accreditation

The Paramedic program of Coastal Pines Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensure/Certification Information

Graduates of the Paramedicine program are eligible to sit for the National Registry of Emergency Medical Technicians (NREMT), Paramedic certification, and apply for Georgia licensure with the Georgia Office of EMS and Trauma as a paramedic.

Other Conditions for Admission

Hold certifications and/or licensure as an:

EMT I/85 (with successful completion of Georgia Office of Emergency Medical Services and Trauma EMT I to AEMT course); EMT I/99; or AEMT. Criminal background checks, immunization records, vaccines, and drug screens may be required based for participation in clinical experiences. Personal health insurance may also be required.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 – 113th St. N #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
[Website Link](http://www.caahep.org/)
[https://www.caahep.org/](http://www.caahep.org/)

CoAEMSP

8301 Lakeview Parkway, Suite 111-312
Rowlett, TX 75088
Phone: (214) 703-8445
Fax: (214) 703-8992
[Website Link](http://www.coaemsp.org/)
[https://coaemsp.org/](http://www.coaemsp.org/)

CAAHEP Accredited Paramedic Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2023.

CoAEMSP 3-Year Review of Outcomes Data - Paramedicine:

Cohort	2022 / 2023 / 2024
NREMT Pass Rates	100% / 100% / 70%
Retention Rates	67% / 82% / 100%
Job Placement Rates	100% / 100% / 100%

General Education Course — 9 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3

Occupational Courses — 49 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities of Special Patient Populations	4
EMSP 2510	Clinical Applications for Paramedic I	2
EMSP 2520	Clinical Applications for Paramedic II	2
EMSP 2530	Clinical Applications for Paramedic III	2

EMSP 2540	Clinical Applications for Paramedic IV	1
EMSP 2550	Clinical Applications for Paramedic V	1
EMSP 2560	Clinical Applications for Paramedic Vi	1
EMSP 2570	Clinical Applications for Paramedic VII	1
EMSP 2710	Field Internship for Paramedic	2
EMSP 2720	Practical Applications for Paramedic	3
	Minimum Credit Hours for Graduation	58

Advanced Emergency Medical Tech (AEMT) EMH1

Type

Technical Certificate of Credit

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency

Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Advanced Emergency Medical Technician (AEMT) program are eligible to sit for the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 10 Hours

Item #	Name	Credits

EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical & Practical Applications for the AEMT	3
	Minimum Credit Hours for Graduation	10

Emergency Medical Responder (EMR), EB71 Type

Technical Certificate of Credit

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may take the National Registry of Emergency Medical Technicians EMR certification examination.

Program Approval

Licensure/Certification Information

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may be offered at the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 11 Hours

Item #	Name	Credits
ALHS 1011	Structure & Function of the Human Body	5
EMSP 1010	Emergency Medical Responder	4
ALHS 1090	Medical Terminology for AHS	2
	Minimum Credit Hours for Graduation	11

Emergency Medical Technician (EMT) EMJ1 Type

Technical Certificate of Credit

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS

response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Program Approval

The Emergency Medical Technician (EMT) program is approved by the Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Graduates of the Emergency Medical Technician (EMT) program are eligible to sit for the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT.

Other Conditions of Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes rotate between Waycross, Brunswick, and Jesup.

Required Courses — 16 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
	Minimum Credit Hours for Graduation	16

Pre-hospital EMS Operations PEO1 Type

Technical Certificate of Credit

The Prehospital EMS Operations certificate program combines Emergency Medical Technician and Advanced Emergency Medical Technician. This certificate prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. This certificate allows the graduate to function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical

Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians AEMT certification examination and apply for Georgia licensure as an AEMT.

Program Approval

The Advanced Emergency Medical Technician (AEMT) program is approved by Georgia Department of Public Health, Office of Emergency Medical Services and Trauma (SOEMST).

Licensure/Certification Information

Upon successful completion of EMSP 1110, 1120, 1130, 1150 and 1160, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) EMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for EMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST).

<http://ems.ga.gov/>

Upon successful completion EMSP 1110, 1120, 1130, 1140, 1150, 1160, 1510, 1520 1530 and 1540, students may be able to sit for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification examination.

<http://www.nremt.org/>

After successful completion of the NREMT examination for AEMT, students may apply for Georgia state licensure through the State Office of Emergency Medical Services and Trauma(SOEMST).

<http://ems.ga.gov/>

Other Conditions of Admission

Submit documentation of current certification and/or licensure as an: EMT or EMT-Basic (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMT-B to AEMT update course); or proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Location Note - Classes may also be offered on the following campuses:

- Alma, Baxley, Brunswick, Jesup

Required Courses — 26 Hours

Item #	Name	Credits
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	Assess/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock & Trauma for the EMT	3
EMSP 1160	Clinical & Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1

EMSP 1540	Clinical & Practical Applications for the AEMT	3
	Minimum Credit Hours for Graduation	26

Paramedicine Course Descriptions

EMSP 1010 : Emergency Medical Responder

The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardio-pulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Credits 4

Corequisites

ALHS 1011

ALHS 1090

EMSP 1110 : Introduction to the EMT Profession

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

Credits 3

EMSP 1120 : Assess/Airway Management & Pharmacology

This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

Credits 3

EMSP 1130 : Medical Emergencies for the EMT

This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

Credits 3

EMSP 1140 : Special Patient Populations

This course provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations- Assessments.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1150

EMSP 1160

EMSP 1150 : Shock & Trauma for the EMT

This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

Credits 3

Prerequisites

EMSP 1110

EMSP 1120

Corequisites

EMSP 1130

EMSP 1140

EMSP 1160

EMSP 1160 : Clinical & Practical Applications for the EMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

Credits 1

EMSP 1510 : Advanced Concepts for the AEMT

This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems; Documentation; EMS System Communication; Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

Credits 3

EMSP 1520 : Advanced Patient Care for the AEMT

This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; and Integration of Medical/Trauma Assessments.

Credits 3

Corequisites

EMSP 1510

EMSP 1530 : Clinical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

Credits 1

Corequisites

EMSP 1510

EMSP 1520

EMSP 1540 : Clinical & Practical Applications for the AEMT

This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

Credits 3

Corequisites

EMSP 1510

EMSP 1520

EMSP 1530

EMSP 2110 : Foundations of Paramedicine

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

Credits 3

Corequisites

ALHS 1011

EMSP 2120 : Applications of Pathophysiology for Paramedics

This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

Credits 3

Corequisites

EMSP 2110

EMSP 2130 : Advanced Resuscitative Skills

This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

Credits 3

Corequisites

EMSP 2110

EMSP 2120

EMSP 2140 : Advanced Cardiovascular Concepts

This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

Credits 4

Corequisites

EMSP 2110

EMSP 2130

EMSP 2310 : Therapeutic Modalities of Cardiovascular Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

Credits 3

Corequisites

EMSP 2140

EMSP 2320 : Therapeutic Modalities of Medical Care

This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

Credits 5

Corequisites

EMSP 2110

EMSP 2330 : Therapeutic Modalities of Trauma Care

This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

Credits 4**Prerequisites**

EMSP 2320

Corequisites

EMSP 2110

EMSP 2140

EMSP 2340 : Therapeutic Modalities of Special Patient Populations

This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

Credits 4**Prerequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2140

Corequisites

EMSP 2330

EMSP 2510 : Clinical Applications for Paramedic I

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Corequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2520 : Clinical Applications for Paramedic II

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Corequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2530 : Clinical Applications for Paramedic III

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 2**Prerequisites**

EMSP 2110

EMSP 2120

EMSP 2130

EMSP 2510

EMSP 2520

Corequisites

EMSP 2140

EMSP 2310

EMSP 2320

EMSP 2540 : Clinical Applications for Paramedic IV

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2140
EMSP 2310
EMSP 2320

EMSP 2550 : Clinical Applications for Paramedic V

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340

EMSP 2560 : Clinical Applications for Paramedic Vi

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550

EMSP 2570 : Clinical Applications for Paramedic VII

This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

Credits 1**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2710 : Field Internship for Paramedic

Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

Credits 2**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560

EMSP 2720 : Practical Applications for Paramedic

Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

Credits 3**Prerequisites**

EMSP 2110
EMSP 2120
EMSP 2130
EMSP 2140
EMSP 2510
EMSP 2520

Corequisites

EMSP 2330
EMSP 2340
EMSP 2550
EMSP 2560
EMSP 2710

PHLT - Phlebotomy

Phlebotomy Technician PT21

Type

Technical Certificate of Credit

The Phlebotomy Technician program educates students to collect blood and process blood and body fluids. Phlebotomy technicians typically work in concert with clinical laboratory personnel and other healthcare providers in hospitals or other healthcare facilities. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Required Courses — 24 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
Minimum Credit Hours for Graduation		24

Phlebotomy Course Descriptions

PHLT 1030 : Introduction to Venipuncture

Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

Credits 3

Prerequisites

ALHS 1011, ALHS 1090, & ALHS 1040.

PHLT 1050 : Clinical Practice

Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

Credits 5

Prerequisites

PHLT 1030.

PHYS - Physics

Physics Course Descriptions

PHYS 1110 : Conceptual Physics

Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 3

Prerequisites

MATH 1111

ENGL 1101

Corequisites

PHYS 1110L

PHYS 1110L : Conceptual Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

Credits 1

Prerequisites

MATH 1111

Corequisites

PHYS 1110

PHYS 1111 : Introductory Physics I

The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

Credits 3

Prerequisites

ENGL 1101

MATH 1112

MATH 1112 OR MATH 1113

Corequisites

PHYS 1111L

PHYS 1111L : Introductory Physics I Lab

Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one and two dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

Credits 1

Corequisites

PHYS 1111

PHYS 1112 : Introductory Physics II

Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

Credits 3

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112L

PHYS 1112L : Introductory Physics Lab

Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

Credits 1

Prerequisites

PHYS 1111

PHYS 1111L

Corequisites

PHYS 1112

Practical Nursing and Related

Behavioral Health Technician BHT1

Type

Technical Certificate of Credit

A behavioral health technician is a medical professional who helps treat patients with behavioral or mental health issues. They work with patients who have a variety of conditions, including: substance use disorders, post-

traumatic stress disorder, physical or emotional abuse, mental instability, dementia, and psychosis. Behavioral health technicians work with psychiatrists and psychiatric nurses and provide direct care to patients. They are also responsible for maintaining a safe environment for patients and staff.

— 12 Hours

Item #	Name	Credits
HECT 1011	Introduction to Behavioral Health	3
HECT 1012	Behavioral Health Basic Trauma - Informed Care	2
HECT 1013	Legal & Ethical Issues of Behavioral Health Technicians	4
ALHS 1040	Introduction to Health Care	3
Minimum Credit Hours for Graduation		12

Geriatric Care Assistant GC51

Type

Technical Certificate of Credit

The Geriatric Care Assistant Technical Certificate provides the basic knowledge and skills needed to qualify for employment as a nurse aide in nursing homes, elder personal care homes, and home healthcare agencies. The certificate emphasizes geriatric patient care, CPR, and first aid. Students successfully completing the certificate are eligible to be placed on the State Registry for nurse aides.

Required Courses — 12 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
GERT 1000	Understanding the Gerontological Client	2
GERT 1020	Behavioral Aspects of Aging	2
GERT 1030	Gerontological Nutrition	1

Nurse Aide Course Selection — 6-7.00 Hours

Item #	Name	Credits	Max Credits
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	
Minimum Credit Hours for Graduation		18-19	

Health Care Assistant HA21

Type

Technical Certificate of Credit

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of

health care delivery and are well prepared for employment and subsequent upward mobility.

*** Students must complete one of the listed specializations**

Basic Skills and Occupational Courses — 22 Hours

Item #	Name	Credits
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
COMP 1000	Introduction to Computer Literacy	3
ALHS 1011	Structure & Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ALHS 1040	Introduction to Health Care	3
	MATH 1012 or MATH 1013	3

Nursing Specialization BNS1 — 8-9 Hours

Item #	Name	Credits	Max Credits
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2	
NAST 1100 or NAST 2100	Nurse Aide Fundamentals	6-7	

Phlebotomy Specialization 8PS1 — 8 Hours

Item #	Name	Credits

PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

Medical Assisting Specialization 8MA1 — 4 Hours

If previously taken BUSN 1440; BUSN 1440 will satisfy BUSN 1460.

Item #	Name	Credits
MAST 1060	Medical Office Procedures	4

Medical Office Support Specialization 8M31 — 11 Hours

Item #	Name	Credits
MAST 1010	Legal & Ethical Concerns	2
MAST 1060	Medical Office Procedures	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3

Surgical Technology Specialization 8ST1 — 8 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
	Minimum Credit Hours for Graduation	30-31

Nurse Aide CN21

Type

Technical Certificate of Credit

The Nurse Aide Technical Certificate of Credit prepares students with classroom training and practice as well as the clinical experiences necessary to care for patients in various settings including general medical and surgical hospitals, nursing care facilities, community care facilities for the elderly, and home health care services. Students who successfully complete the Nurse Aide Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

Program Approval

The Nurse Aide program is approved by the Georgia Medical Care Foundation.

Certification Information

Upon successful completion of NAST 1100, students may apply to the National Nurse Aide Assessment Program (NNAAP) which determines competency to be enrolled in the Georgia State Nurse Aide registry.

Other Conditions for Admission

Students enrolled in the Nurse Aide program may be required to successfully pass both criminal background checks and drug screening procedures to participate in clinical experiences with patients in licensed facilities.

Required Courses — 13 Hours

Item #	Name	Credits
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet & Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for AHS	2
NAST 1100	Nurse Aide Fundamentals	6
	Minimum Credit Hours for Graduation	13

Nurse Aide Fast Track, NAF5

Type

Technical Certificate of Credit

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and

interpersonal skills; topography, structure, and function of the body systems; injury.

— 3 Hours

Item #	Name	Credits
NAST 2105	Nurse Aide Fast Track	3
	Minimum Credit Hours for Graduation	3

Practical Nursing Certificate PN21

Type

Technical Certificate of Credit

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. The nursing program covers all theoretical content areas outlined in Georgia Board Rule 410-9-06 (5a & 5b). A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a practical nursing certificate and have the qualifications of an entry-level practical nurse. The PN21 program is a certificate program to be implemented with new cohorts of students beginning Spring 2024 and beyond. Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen to be placed in a clinical health care

facility to complete the clinical rotations of their educational training.

Program Approval

The Practical Nursing program is approved by the Georgia Board of Examiners of Licensed Practical Nurses.

<http://sos.georgia.gov/plb/lpn>

Licensure Information:

Graduates of the program are eligible to sit for the NCLEX-PN licensure required to obtain licensure as a Georgia LPN.

Other Conditions for Admission

Students most commonly will have to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical healthcare facility to complete the clinical portions of their educational training.

Entrance Requirements

TEAS Test with a minimum of 58.7%

Competitive Admissions Program:

More Information to come.

Occupational Courses — 49 Hours

Item #	Name	Credits
PNSG 1600	Introduction to Pharmacology and Clinical Calculations	3
PNSG 1605	Fundamentals	6
PNSG 1630	Mental Health Nursing	4
PNSG 1610	Adult Health Nursing I	6
PNSG 1615	Adult Health Nursing II	6
PNSG 1635	Maternal Nursing	4
PNSG 1640	Pediatric Nursing	3

PNSG 1620	Adult Health Nursing III	6
PNSG 1625	Adult Health Nursing IV	6
PNSG 1645	Practical Nursing Capstone	5
Minimum Credit Hours for Graduation		49

Practical Nursing and Related Course Descriptions

ALHS 1010 : Introduction to Anatomy & Physiology

Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology
Credits 4

ALHS 1011 : Structure & Function of the Human Body

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system
Credits 5

ALHS 1040 : Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens
Credits 3

ALHS 1060 : Diet & Nutrition for Allied Health Sciences

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education
Credits 2

ALHS 1090 : Medical Terminology for AHS

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.
Credits 2

GERT 1000 : Understanding the Gerontological Client

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens
Credits 2

GERT 1020 : Behavioral Aspects of Aging

This course addresses behavioral health issues associated with aging, including psycho-social impact of cultural and cohort influences; a discussion of prevention, diagnosis, assessment, and intervention; as well as an examination of pertinent legislation.
Credits 2

GERT 1030 : Gerontological Nutrition

This course provides a study of the nutritional needs of the individual, including older adults. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.
Credits 1

HECT 1011 : Introduction to Behavioral Health

This course provides a comprehensive introduction to the field of behavioral health. It covers fundamental concepts, common conditions, treatment approaches, and factors influencing behavioral health. Students will explore the importance of communication, healthy relationships, and patterns of addictive behaviors. The course also introduces various mental health disorders and aims to dispel common misconceptions in the field.
Credits 3

HECT 1012 : Behavioral Health Basic Trauma - Informed Care

This course provides fundamental training in trauma-informed care principles and practices, enabling students to apply this knowledge in various healthcare and social service settings. Topics include foundations of trauma-informed care, principles of trauma-informed care, and addressing barriers to trauma-informed care. Upon completion, students will have a comprehensive understanding of trauma-informed approaches and be able to implement these strategies in their professional practice.

Credits 2

HECT 1013 : Legal & Ethical Issues of Behavioral Health Technicians

This comprehensive course covers the essential legal and ethical issues that behavioral health technicians need to understand and apply in their practice. It encompasses professional ethics, workplace professionalism, documentation practices, legal regulations, patient rights and confidentiality, ethical decision-making, abuse prevention, safety measures, personal protection, crisis intervention, de-escalation techniques, and the appropriate use of restraints. Students will develop critical thinking skills to navigate complex ethical dilemmas while adhering to legal requirements and professional standards in the behavioral health field.

Credits 4

NAST 1100 or NAST 2100 : Nurse Aide Fundamentals

Introduces the student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a resident/patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents' rights; basic patient care skills; personal care skills; and restorative care.

Credits 6

-7

Prerequisites

NAST 2100 Co-requisites apply.

Corequisites

ALHS 1040

ALHS 1090

PNSG 1600 : Introduction to Pharmacology and Clinical Calculations

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills and introduces pharmacological classes. Topics include systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education. After this pharmacology course, students will have completed a minimum of 85 lecture/lab (4250/50min) hours.

Credits 3

PNSG 1605 : Fundamentals

An introduction to the nursing process and clinical practice, normal body system function, and terminology related to healthcare. Topics include: nursing as a profession; scope of practice; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, history taking, and an introduction to structure, function, terminology associated with healthcare, and physical assessment of body systems; customer/client relationships; standard precautions; activities of daily living; infection control/ blood-borne/ airborne pathogens; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care. At the end of the course, students will have completed a minimum of 66 lecture/lab (3300/50min) hours and 75 clinical (4500/ 60min) hours.

Credits 6

PNSG 1610 : Adult Health Nursing I

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include terminology associated with healthcare, structure and function of body systems, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions concerning the cardiovascular, respiratory, and hematological and immunological systems. Clinical topics include but are not limited to hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions about cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1615 : Adult Health Nursing II

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary systems. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1620 : Adult Health Nursing III

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological and sensory systems, disaster preparedness, emergency response, triage, and bioterrorism. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions concerning cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. This course contains lectures and regular lab 4125/50 =82.5 hours and clinical has 3750/60 =62.5 hours.
Credits 6

PNSG 1625 : Adult Health Nursing IV

Focuses on client care and clinical client care including using the nursing process, performing assessments, developing critical thinking, engaging in client education, and displaying cultural competence in the adult population and with attention to special populations. Lecture/lab topics include functions of the human body, terminology associated with healthcare, health management, and maintenance; prevention of illness; care of the individual as a whole; immunology; as well as pathological diseases, disorders, and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and musculoskeletal systems and oncology. Clinical topics include but are not limited to: hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology, and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems. After, this adult health course students will have completed a minimum of 4125/50= 82.5 lecture/lab contact hours and 3750/60=62.5 clinical hours.

Credits 6

PNSG 1630 : Mental Health Nursing

Presents concepts within the field of mental health nursing and their application to everyday human behavior, thinking, emotion, and communication. Focuses on health management and maintenance and the prevention of illness, care of the mental health patient as a whole, and deviations from the normal state of health. Emphasis is placed on students' understanding of mental health principles and their application within the context of family, work, and social interactions. Topics include an overview of psychological disorders and their treatments; terminology associated with health care, stress, and health; health management and maintenance and prevention of illness; care of the mental health patient as a whole, and deviations from the normal state of health in the mental health client; client care, pharmacology, and diet therapy of the mental health client; and standard precautions. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. At completion of this mental health course, students will have completed a minimum of 75 (3750/50) lecture contact hours and 25 (1500/60) clock hours of mental health-related clinical experience.

Credits 4

PNSG 1635 : Maternal Nursing

Focuses on maternal and newborn patient care aspects of health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span, and with attention to special populations. Topics include the function of the human body systems, terminology associated with healthcare, health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn, and standard precautions. After this maternity course, students will have completed a minimum of 1500/50 (30) lecture and lab contact hours and 3000/60 (50) clock hours of reproductive, maternity, and newborn-related clinical experience.

Credits 4

PNSG 1640 : Pediatric Nursing

Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client, care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; functions of the human body, terminology associated with healthcare, and standard precautions. After this pediatric course, students will have completed a minimum of 45 (2250/50) lecture/lab contact hours and 25 (1500/60) clock hours of pediatric-related clinical experience.

Credits 3

PNSG 1645 : Practical Nursing Capstone

Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group dynamics, professional oral and written communication, and conflict resolution. At completion of this nursing leadership course, students will have completed a minimum of 54 lecture/lab (2700/50 min) hours and 60 clock (3600/60 min) hours of leadership-related clinical experience.

Credits 5

PSYC - Psychology

Psychology Course Descriptions

PSYC 1010 : Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work, and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatments, stress and health, and social psychology.

Credits 3

PSYC 1101 : Introductory Psychology

Introduces the major fields of contemporary psychology. Emphasis is on critical thinking and fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychological disorders and treatment, stress and health, and social psychology.

Credits 3

RADT - Radiologic Technology

**Radiologic Technology
RT23****Type**

Associate of Applied Science, AAS

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Program Accreditation

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago IL 60606-3182
<http://www.jrcert.org/>

Program Web Page

[Application for Admissions](#)

Other Conditions for Admission

Criminal background checks and drug screens are required based on the requirements for participation in clinical experiences.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

* Choose one of the following:

Item #	Name	Credits
MATH 1111	College Algebra	3
MATH 1101	Mathematical Modeling	3

[MATH 1103](#) Quantitative Skills & Reasoning 3

Area IV - Humanities/ Fine Arts — 3 Hours

* Choose one of the following:

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3
THEA 1101	Theater Appreciation	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-General Education Degree Courses — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 54 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	3
RADT 1075	Radiographic Imaging	4
RADT 1320	Clinical Radiography I	4
RADT 1060	Radiographic Procedures II	3
RADT 1065	Radiologic Science	2
RADT 1085	Radiologic Equipment	3
RADT 1330	Clinical Radiography II	7
RADT 2090	Radiographic Procedures III	2
RADT 2340	Clinical Radiography III	6
RADT 1200	Principles of Radiation Biology & Protection	2
RADT 2260	Radiologic Technology Review	3
RADT 2360	Clinical Radiography IV	9
Minimum Credit Hours for Graduation		77

Radiologic Technologist Assistant RT21

Type

Technical Certificate of Credit

The Radiologic Technician Assistant program places emphasis on maintaining adequate supplies in exam rooms, handling of oxygen tanks, ability to process CR & DR, knowledge of PACS system, transporting patients to/from all imaging areas, greeting patients

and assists in preparing the patients for exams, preparation of the examination rooms, and dismissing the patient after the exam is completed giving any special instructions needed.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits
COLL 1010	College and Career Success Skills	3
ECON 1101	Principles of Economics	3
HIST 1111	World History I	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3

Biology Requirement — 8 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1

Occupational Courses — 8 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
IMSA 1100	Clinical Practice	2
RADT 1010	Introduction to Radiology	4
	Minimum Credit Hours for Graduation	25

Radiologic Technology Course Descriptions

IMSA 1100 : Clinical Practice

Introduces students to the hospital clinical setting and medical office facilities with imaging services and provides an opportunity for students to participate in or observe radiographic and modality imaging procedures. Topics include: medical office and hospital protocol, film processing procedures, basic patient care, radiation safety radiographic procedure responsibilities, and office and film room procedures.

Credits 2

Prerequisites

RADT 1010

RADT 1010 : Introduction to Radiology

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

Credits 4**Prerequisites**

ENGL 1101

Program Admission.

RADT 1030 : Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

Credits 3**Prerequisites**

Program Admission.

RADT 1060 : Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures.

Credits 3**Prerequisites**

Program Admission.

RADT 1065 : Radiologic Science

Content of this course is designed to establish a basic knowledge of atomic structure and terminology. Other topics include the nature and characteristics of x-radiation; ionizing and non-ionizing radiation; x-ray production; the properties of x-rays and the fundamentals of x-ray photon interaction with matter.

Credits 2**Prerequisites**

Program Admission.

RADT 1075 : Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high-quality diagnostic radiographic images. Topics include: Image quality (radiographic IR exposure; radiographic contrast; spatial resolution; distortion; grids; image receptors and holders; processing considerations; image acquisition ; image analysis; image artifacts; and guidelines for selecting exposure factors and evaluating images within a digital system. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 4**Prerequisites**

MATH 1101

RADT 1010

Program Instructor Approval.

RADT 1085 : Radiologic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

Credits 3**Prerequisites**

Program Admission.

RADT 1200 : Principles of Radiation Biology & Protection

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

Credits 2**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1320 : Clinical Radiography I

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 4**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 1330 : Clinical Radiography II

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 7**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2090 : Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures.

Credits 2**Prerequisites**

Program Admission.

RADT 2260 : Radiologic Technology Review

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: Patient Care (Patient Interactions and Management), Safety (Radiation Physics, Radiobiology and Radiation Protection), Image Production (Image Acquisition, Technical Evaluation, Equipment Operation and Quality Assurance), and Procedures (Head, Spine, Pelvis, Thorax, Abdomen and Extremities).

Credits 3**Prerequisites**

Program Admission.

RADT 2340 : Clinical Radiography III

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 6**Prerequisites**

BIOL 2114

BIOL 2114L

Program Admission.

RADT 2360 : Clinical Radiography IV

Content and clinical practice experience should be designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences should be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during and following the radiologic procedure.

Credits 9

Prerequisites

BIOL 2114

BIOL 2114L

Program Admission.

RRTC - Railroad Industry

Railroad Systems Management Technology RSM3 (NO Longer Accepting Students)

Type

Associate of Applied Science, AAS

The Railroad Systems Management Technology AAS prepares graduates for careers as supervisors in the rail industry.

*** Students must complete one of the Specializations below:**

- Mechanical Specialization 8M33
- Electrical Specialization 8E43

Area I - Language Arts/Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits

Mathematics — Hours

Item #	Name	Credits
MATH 1100	Quantitative Skills & Reasoning	3
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills & Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Precalculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
MATH 1133	Calculus III	4

Natural Sciences — Hours

* All corresponding labs are **corequisite** to meet degree requirements

Item #	Name	Credits
BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3
BIOL 1112L	Biology Lab II	1
BIOL 2107	Biological Principles I	3

BIOL 2107L	Biological Principles I Lab	1
CHEM 1151	Survey of Inorganic Chemistry	3
CHEM 1151L	Survey of Inorganic Chemistry Lab	1
CHEM 1152	Survey of Organic Biochemistry	3
CHEM 1211	Chemistry I	3
CHEM 1212	Chemistry II	3
PHYS 1110	Conceptual Physics	3
PHYS 1111	Introductory Physics I	3
PHYS 1111L	Introductory Physics I Lab	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab	1

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course
from the complete Area I, II, III,
or IV listings:

- [General Education Courses](#)

Occupational Courses — 31 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
ACCT 1100	Financial Accounting I	4
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Rules & Regulations	3
MGMT 2120	Labor Management Skills	3
MGMT 2135	Management Communication Techniques	3
SCMA 1003	Introduction to Transportation & Logistics Management	3
SCMA 2103	Supply Chain Management Concepts	3
IDFC 1007	Industrial Safety Procedures	2
RRTC 1010	Introduction to the Railroad Industry	4

Mechanical Specialization 8M33 — 14 Hours

Item #	Name	Credits
RRTC 1040	Locomotive Mechanical Systems	3

ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
Advisor Approved Electives (7 hrs)		7

Electrical Specialization 8E43 — 14 Hours

Item #	Name	Credits
RRTC 1020	Locomotive Electrical Systems	4
ELCR 2120	Motor Controls	3
IDSY 1100	Basic Circuit Analysis	5
Advisor Approved Electives (2 hrs)		2

— Hours

Minimum Credit Hours for Graduation	60

Locomotive Car Repair Systems Technology LRS2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Car Repair
Systems Technology diploma
prepares students for a career in
the railroad/locomotive industry
as a Car Repairman, Sheet Metal
Worker, or Pipe Fitter.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3

EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 40 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1153	Flux Cored Arc Welding	4
ELCR 2140	Mechanical Devices	2
	Minimum Credit Hours for Graduation	48

Locomotive Electrical and Mechanical Technology LEA2 (NO Longer Accepting Students)

Type
Diploma

The Locomotive Electrical/
Mechanical Technology program
will prepare students for
employment in the railroad
industries. Students will gain skills
to become locomotive
electricians, locomotive
mechanics, car repairman, and
sheet metal workers.

Basic Skills Core — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations & Professional Development	2
ENGL 1010	Fundamentals of English I	3

Occupational Courses — 50 Hours

Item #	Name	Credits
COMP 1000	Introduction to Computer Literacy	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4

WELD 1090	Gas Metal Arc Welding	4
ELCR 2120	Motor Controls	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
IDSY 1100	Basic Circuit Analysis	5
	Minimum Credit Hours for Graduation	58

Locomotive Car Repair Technician LCR1

Type
Technical Certificate of Credit

Diagnose, adjust, repair, or
overhaul railroad cars. Students
will become familiar with the rail
industry; knowledge of
locomotives (EMD and GE) and
locomotive air brake systems;
Department of Transportation
and FRA rules and OSHA
regulations; fundamental
concepts and operations of
locomotive mechanical systems.
Students will be proficient with
safety practices, equipment, and
techniques necessary for metal
heating and cutting principles;
cutting torches and apparatus;
metal heating techniques; metal
cutting techniques; manual and
automatic oxyfuel cutting
techniques; oxyfuel pipe cutting;
reading welding and related
blueprints and sketches; shielded
metal arc welding (SMAW) in flat
positions; horizontal SMAW
safety and health practices;
selection and applications of
electrodes, selection and
applications for horizontal SMAW;
horizontal SMAW joints;
techniques required for shielded
metal arc welding (SMAW) in the
vertical position; selection and
applications of electrodes for
vertical SMAW, vertical SMAW
joints, and vertical SMAW to
specification; overhead SMAW

safety techniques required for successful flux cored arc welding (FCAW); machine set up and operation; shielded gas and selection; and FCAW joints in all positions.

Required Courses — 18 Hours

Item #	Name	Credits
ELCR 2140	Mechanical Devices	2
RRTC 1010	Introduction to the Railroad Industry	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
	Minimum Credit Hours for Graduation	18

Locomotive Electrical Systems LE51

Type

Technical Certificate of Credit

The Locomotive Electrical Systems certificate is designed to prepare students to work as electrical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive electrical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 18 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2120	Motor Controls	3
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1020	Locomotive Electrical Systems	4
IDSY 1100	Basic Circuit Analysis	5
	Minimum Credit Hours for Graduation	18

Locomotive Mechanical Systems LM31

Type

Technical Certificate of Credit

The Locomotive Mechanical Systems certificate is designed to prepare students to work as mechanical technicians in the rail industry with specific knowledge and skills for diesel/electric locomotives. Upon completion of this technical certificate of credit students will be trained for entry-level positions in the rail industry as locomotive mechanical technicians.

Employment Condition

Federal regulations require Railroad employees to be at least 19 years of age.

Required Courses — 17 Hours

Item #	Name	Credits
IDFC 1007	Industrial Safety Procedures	2
ELCR 2140	Mechanical Devices	2

ELCR 2150	Fluid Power	2
RRTC 1010	Introduction to the Railroad Industry	4
RRTC 1040	Locomotive Mechanical Systems	3
WELD 1030	Blueprint Reading for Welding Technology	4
	Minimum Credit Hours for Graduation	17

Railroad Industry Course Descriptions

RRTC 1010 : Introduction to the Railroad Industry

Introduces the fundamental concepts and operations in the Railroad Industry. Topics include introduction to the rail industry, locomotive familiarization, EMD locomotives, GE locomotives, introduction to locomotive air brake systems, introduction to the Department of Transportation, and FRA rules overview.

Credits 4

Corequisites

IDFC 1007

RRTC 1020 : Locomotive Electrical Systems

Introduces a basic understanding of locomotive electrical systems and how to use blueprints and charts for reference.

Credits 4

Prerequisites

RRTC 1010

RRTC 1040 : Locomotive Mechanical Systems

Introduces the fundamental concepts and operations of locomotive mechanical systems.

Credits 3

Prerequisites

RRTC 1010

SCMA 1003 : Introduction to Transportation & Logistics Management

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the five basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's supply chain manager can use these transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.
Credits 3

SCMA 2103 : Supply Chain Management Concepts

Logistics and Supply Chain Management today represents a great challenge as well as a tremendous opportunity for most firms. This course will view the supply chain from the point of view of a front-line supervisor. Logistics and Supply Chain Management is all about managing hand-offs in a supply chain, hand-offs of either information or product. Phrases like logistics management, supply chain management and demand chain management will be used interchangeably in order to provide an understanding on how logistical decisions impact the performance of the firm as well as the entire supply chain.
Credits 3
Prerequisites
SCMA 1003

READ - Reading Writing

Reading Writing Course Descriptions

READ 0090 : Learning Support Reading I

No description available at this time.
Credits 3

READ 0091 : Learning Support Reading II

Credits 3
Prerequisites
minimum COM1 score of 78 or minimum ACCR score of 063.

READ 0096 : Reading I

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.
Credits 3

Prerequisites

minimum ASRB score of 30 or minimum ASRC score of 30 or RDG 095 grade of S or higher or minimum COM1 score of 46.

READ 0097 : Reading II

Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.
Credits 3

Prerequisites

minimum ASRB score of 33 or minimum ASRC score of 33 or RDG 096 grade of S or higher or minimum COM1 score of 49.

READ 0098 : Reading III

Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.
Credits 3

Prerequisites

minimum ASRB score of 38 or minimum ASRC score of 38 or RDG 097 grade of S or higher or minimum COM1 score of 70.

RELG - Religion

Religion Course Descriptions

RELG 1101 : World Religion

Introduction to World Religions is a survey course of the history, practice, and modern relevance of the world's religious traditions. Through the study of religion and its influence on history and culture, greater insight and understanding of diverse populations can be attained. Topics include an overview of significant religious traditions from around the world, critical analysis of the relationships between religions and artistic traditions, and critical analysis of the influence of religion on culture, politics, and history.
Credits 3

Prerequisites

ENGL 1101.

RESP - Respiratory Care

Respiratory Care RCT3

Type

Associate of Applied Science, AAS

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree which qualifies them to take the examinations to become Registered Respiratory Therapists. The goal of the program is to prepare graduates with the demonstrated competence in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs). **The standards for the program can be viewed by clicking [here](#).**

Students may take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential. To work in the

state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license in the state of Georgia is to pass both TMC and CSE exams and earn RRT credential.

Program Accreditation

"The Coastal Pines Technical College Respiratory Care Technology Program (CoARC Program Number: 200480) awards an Associate of Applied Science degree on the Waycross campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)."

Commission on Accreditation for Respiratory Care (CoARC)
264 Precision Blvd. Telford, TN 37690
<http://www.coarc.com/>

CoARC Program Number:
200480

Program Goal

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs)

Programmatic Data Information

"CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes-based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."

[Programmatic Outcomes Data](#)

Certification Information

Graduates will take the National Board for Respiratory Care's (NBRC's) Therapist Multiple Choice Exam (TMC). Graduates seeking to earn an NBRC credential in order to enter the profession must take this examination. The NBRC utilizes two cut scores for the TMC exam; graduates attaining the low-cut score will obtain the CRT credential. Achieving the high cut score means that, in addition to earning the CRT, a graduate is eligible to take the Clinical Simulation Exam (CSE). Graduates who pass the CSE earn the RRT credential.

State Respiratory Care Boards

Other Conditions for Admission

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

* Choose one of the following courses:

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3

ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
PSYC 1101	Introductory Psychology	3
SOCI 1101	Introduction to Sociology	3

Area III - Natural Sciences/Mathematics — 7 Hours

* Choose one of the following courses:

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3
	CHEM 1151 or CHEM 1211	4

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
RELG 1101	World Religion	3
THEA 1101	Theater Appreciation	3

Non-General Education Degree Courses — 12 Hours

Item #	Name	Credits
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 50 Hours

Item #	Name	Credits
RESP 1110	Pharmacology	3
RESP 2090	Clinical Practice I	2
RESP 2110	Pulmonary Disease	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1120	Introduction to Respiratory Therapy	3
RESP 2100	Clinical Practice II	2
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2180	Clinical Practice III	2
RESP 2120	Critical Respiratory Care	2
RESP 2130	Mechanical Ventilation & Airway Management	4
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3

RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2270	Rehabilitation and Home Care	1
RESP 2220	Clinical Practice VI	7
RESP 2150	Pulmonary Function Testing	1
RESP 1193	Cardiopulmonary A & P	4
Minimum Credit Hours for Graduation		78

Respiratory Care Course Descriptions

[RESP 1110 : Pharmacology](#)

Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following

Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 1120 : Introduction to Respiratory Therapy

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Credits 3

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1130

RESP 1193

RESP 1130 : Respiratory Therapy Lab I

Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

Corequisites

RESP 1120

RESP 1193

RESP 1193 : Cardiopulmonary A & P

Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

Credits 4

Prerequisites

BIOL 2114

BIOL 2114L

Choose One of the Following Math Courses:

[MATH 1101](#), [MATH 1103](#), or [MATH 1111](#)

RESP 2090 : Clinical Practice I

Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

Credits 2

Prerequisites

RESP 1110

RESP 1193

RESP 2100 : Clinical Practice II

Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Corequisites

RESP 2090

RESP 2110 : Pulmonary Disease

Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

Credits 3

Corequisites

RESP 1110

RESP 1120

RESP 1193

RESP 2120 : Critical Respiratory Care

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Credits 2

Prerequisites

RESP 1120

RESP 1130

RESP 2130 : Mechanical Ventilation & Airway Management

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Credits 4

Prerequisites

RESP 1120

RESP 1130

Corequisites

RESP 2120

RESP 2140 : Advanced Critical Care Monitoring

Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

Credits 1

Prerequisites

RESP 1120

RESP 1130

RESP 1193

RESP 2150 : Pulmonary Function Testing

Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

Credits 1

Prerequisites

RESP 1193

RESP 1130

RESP 1193

RESP 2160 : Neonatal Pediatric Respiratory Care

Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

Credits 3

Prerequisites

RESP 1120

RESP 1130

RESP 2170 : Advanced Respiratory Care Seminar

Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

Credits 3

Prerequisites

RESP 2120

RESP 2130

RESP 2180 : Clinical Practice III

Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

Credits 2

Prerequisites

RESP 2100

Corequisites

RESP 2100

RESP 2190 : Clinical Practice IV

Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

Credits 2

Corequisites

RESP 2180

RESP 2130

RESP 2200 : Clinical Practice V

Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

Credits 3

Corequisites

RESP 2180

RESP 2120

RESP 2130

RESP 2190

RESP 2220 : Clinical Practice Vi

Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

Credits 7

Prerequisites

RESP 2190

RESP 2120

RESP 2130

RESP 2190

RESP 2270 : Rehabilitation and Home Care

Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

Credits 1

Prerequisites

RESP 1120

SOCI - Sociology

Sociology Course Descriptions

SOCI 1101 : Introduction to Sociology

Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

Credits 3

SPAN - Spanish

Spanish Course Descriptions

SPAN 1101 : Introduction to Spanish

A beginner's introduction to the Spanish language and culture. This course stresses the student's ability to acquire a non-native language and to communicate effectively in the target Spanish language. Emphasis is placed on reading, writing, and speaking the language. An overview of Hispanic society is also emphasized, highlighting the differences between American and Hispanic cultures. Not open to native speakers of Spanish.

Credits 3

Prerequisites

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPAN 1102 : Introduction to Spanish Language and Culture II

A continuation of SPAN1101 that advances the student's acquisition of the target language and understanding of cultural difference between American and Hispanic cultures. Emphasis is placed on improving effective communication skills in the areas of reading, writing, and speaking the Spanish language. Not open to native speakers of Spanish.

Credits 3

Prerequisites

SPAN 1101

Minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SPCH - Speech

Speech Course Descriptions

SPCH 1101 : Public Speaking

Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

Credits 3

Prerequisites

minimum NextGen ACCUPLACER Reading score of 236 and minimum NextGen ACCUPLACER Sentence Skills (Writing) of 249.

SURG - Surgical Technology

Surgical Technology ST13

Type

Associate of Applied Science, AAS

The surgical technology degree program prepares entry-level surgical technologists who are competent in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement in surgical technology. In addition, the program provides opportunities to upgrade present knowledge and skills or to retrain in surgical technology. Graduates of the program receive a surgical technology associate of applied science degree and are qualified for employment as a surgical technologist, as well as eligible to

sit for the Certified Surgical Technologist (CST) examination through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Area I - Language Arts/ Communications — 3 Hours

Item #	Name	Credits
ENGL 1101	Composition and Rhetoric	3

Area II - Social/ Behavioral Sciences — 3 Hours

Item #	Name	Credits

Social/Behavioral Sciences — Hours

Item #	Name	Credits
ECON 1101	Principles of Economics	3
ECON 2105	Macroeconomics	3
ECON 2106	Microeconomics	3
HIST 1111	World History I	3
HIST 1112	World History II	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
POLS 1101	American Government	3
SOCI 1101	Introduction to Sociology	3
PSYC 1101	Introductory Psychology	3

Area III - Natural Sciences/Mathematics — 3 Hours

Item #	Name	Credits
	MATH 1101, MATH 1103, or MATH 1111	3

Area IV - Humanities/ Fine Arts — 3 Hours

Item #	Name	Credits

Humanities/Fine Arts (3 hrs) — Hours

Item #	Name	Credits
ARTS 1101	Art Appreciation	3
ENGL 2110	World Literature	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3
THEA 1101	Theater Appreciation	3
RELG 1101	World Religion	3
SPAN 1101	Introduction to Spanish	3

Specific General Education Core Elective — 3 Hours

* Choose an additional course from the complete Area I, II, III, or IV listings:

- [General Education Courses](#)

Non-Occupational Courses — 14 Hours

Item #	Name	Credits
ALHS 1090	Medical Terminology for AHS	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy & Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy & Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1

Occupational Courses — 43 Hours

Item #	Name	Credits
SURG 1010	Introduction to Surgical Technology	8
SURG 2110	Surgical Technology Clinical I	3
SURG 1020	Principles of Surgical Technology	9
SURG 1100	Surgical Pharmacology	2
SURG 2030	Surgical Procedures I	5
SURG 2120	Surg Tech Clinical II	3
SURG 2040	Surgical Procedures II	5
SURG 2130	Surg Tech Clinical III	3
SURG 2140	Surg Tech Clinical IV	3
SURG 2240	Seminar in Surgical Technology	2
	Minimum Credit Hours for Graduation	72

Surgical Technology Course Descriptions

SURG 1010 : Introduction to Surgical Technology

Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successfully participate on a surgical team. Topics include: introduction to preoperative, intraoperative and postoperative principles of surgical technology, professionalism, and healthcare facility information. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 8

Prerequisites

BIOL 2114
BIOL 2114L

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative, and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114
BIOL 2114L
BIOL 2117
BIOL 2117L
MATH 1111

SURG 1020 : Principles of Surgical Technology

Provides continued study of surgical team participation by wound management and co-related skills for the operating room. Topics include: patient care concepts; preoperative, intraoperative and postoperative skills; perioperative case management; and principles of minimally invasive surgical techniques. (There are surgical procedures that are similar as far as procedural steps, instrumentation, supplies, patient position, etc. This is referred to as the "Co-Related Procedures Concept." The purpose of using the Co-Related Procedures Concept is to provide the instructor additional time to teach surgical procedures as well as avoid repetition.)

Credits 9

Prerequisites

BIOL 2114
BIOL 2114L

SURG 1100 : Surgical Pharmacology

Introduces the concepts of surgical pharmacology and anesthesia. Topics include: terminology; medication calculations and measurements; proper handling of medications and solutions used in surgery; guidelines and regulations for medication safety; and types of anesthesia.

Credits 2

Prerequisites

SURG 1010

SURG 2030 : Surgical Procedures I

Introduces the surgical specialties to include General Surgery, Obstetric and Gynecologic Surgery, Genitourinary Surgery, Otorhinolaryngologic Surgery, and Orthopedic Surgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure.

There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2040 : Surgical Procedures II

Introduces the surgical specialties to include Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, Ophthalmic (Eye) Surgery, Cardiothoracic Surgery, Peripheral Vascular Surgery and Neurosurgery. Topics for each surgical specialty will include Anatomy and Physiology, Pathophysiology, Diagnostic Interventions, specialty supplies, equipment, and instrumentation and the Surgical Procedure. There are similar surgical procedures as far as instrumentation, supplies, patient positioning, and operative sequence. This is referred to as the Co-Related Procedures Concept. The purpose of using the Co-Related Procedures Concept is to allow the instructor time to teach surgical procedures and avoid repetition. As with co-related procedures, the concept of minimally invasive surgery (MIS) as an approach is used and describes any surgical approach other than open. Robotic-assisted and endoscopic procedures are categorized as MIS. Interventional radiology is a medical subspecialty that refers to a range of techniques utilizing radiologic image guidance and minimally invasive procedures to diagnose and treat diseases in several surgical specialties.

Credits 5

SURG 2110 : Surgical Technology Clinical I

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd

Credits 3

SURG 2120 : Surg Tech Clinical II

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3

SURG 2130 : Surg Tech Clinical III

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3**SURG 2140 : Surg Tech Clinical IV**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include, but are not limited to: scrubbing, gowning, gloving, and draping; assistance with patient care and processing of instruments and supplies. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation and/or participation in routine procedures for core and specialty surgery. Surgical specialties include: General, Cardiothoracic, Genitourinary, Neurologic, Obstetric and etc. Case Requirements: A student must complete a minimum of 120 cases as delineated below. A. General Surgery 1. A student must complete a min. of 30 cases in General Surgery. a) 20 of these cases must be performed in the 1st Scrub role. b) The remaining 10 cases may be performed in either the 1st Scrub or 2nd Scrub role. B. Specialty Surgery 1. A student must complete a min. of 90 cases in various surgical specialties, excluding General Surgery. a) A min. of 60 cases must be performed in the 1st Scrub role and distributed amongst a min. of 4 surgical specialties. 1) A min. of 10 cases in 4 different specialties must be completed in the 1st Scrub role (40 cases total). 2) The additional 20 cases in the 1st Scrub role may be distributed amongst any 1 surgical specialty or multiple surgical specialties. b) The remaining 30 cases may be performed in any surgical specialty in either the 1st Scrub or 2nd.

Credits 3**SURG 2240 : Seminar in Surgical Technology**

Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: employability skills and professional preparation.

Credits 2

THEA - Theater Appreciation

Theater Appreciation Course Descriptions

THEA 1101 : Theater Appreciation

Explores history, aesthetics, and craft of the theatrical experience on stage, emphasizing the role of the audience as well as that of the artist. Critical views of theatrical performances are examined alongside scripts. Emphasis is placed on the students' understanding of foundational elements, principles, and theories of dramatic art, including classical and contemporary varieties. The performance components of this course enables students to appreciate the process by which theatre is realized and the creative and cultural significance of theatre as a basic human endeavor.

Credits 3

WELD - Welding and Joining Technology

Welding and Joining Technology WAJ2

Type
Diploma

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

Basic Skills — 8 Hours

Item #	Name	Credits
MATH 1012	Foundations of Mathematics	3
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations & Professional Development	2

Occupational Courses — 46 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4

WELD 1030	Blueprint Reading for Welding Technology	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	4
Program Electives (6 hrs)		6
Minimum Credit Hours for Graduation		54

Advanced Shielded Metal Arc Welder, OSM1

Type
Technical Certificate of Credit

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shield Metal Arc Welding	4

Minimum Credit Hours for Graduation 12

Basic Shielded Metal Arc Welder FS31

Type
Technical Certificate of Credit

The Basic Shielded Metal Arc Welder Technical Certificate of Credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1040	Flat Shielded Metal Arc Welding	4
Minimum Credit Hours for Graduation		12

Gas Metal Arc Welder GM31

Type
Technical Certificate of Credit

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

Required Courses — 12 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1090	Gas Metal Arc Welding	4

Occupational Elective — 3 Hours

Item #	Name	Credits
	Elective (3 credits +)	3
	Minimum Credit Hours for Graduation	15

Gas Tungsten Arc Welder GTA1

Type

Technical Certificate of Credit

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction in TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

Required Courses — 15 Hours

Item #	Name	Credits
WELD 1000	Introduction to Welding Technology	4
WELD 1010	Oxyfuel and Plasma Cutting	4
WELD 1110	Gas Tungsten Arc Welding	4

Occupational Elective (3 hrs)	3
Minimum Credit Hours for Graduation	15

Welding and Joining Technology Course Descriptions

WELD 1000 : Introduction to Welding Technology

This course provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, Oxyacetylene welding and Welding Career potentials.
Credits 4

WELD 1010 : Oxyfuel and Plasma Cutting

Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting, and Plasma cutting. Topics include: metal heating and cutting techniques, metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation and plasma cutting techniques.
Credits 4
Corequisites
WELD 1000

WELD 1030 : Blueprint Reading for Welding Technology

This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.
Credits 4
Prerequisites
WELD 1000
WELD 1010

WELD 1040 : Flat Shielded Metal Arc Welding

This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.
Credits 4
Prerequisites
WELD 1000
WELD 1010

WELD 1050 : Horizontal Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.
Credits 4
Prerequisites
WELD 1000
WELD 1010
Corequisites
WELD 1040

WELD 1060 : Vertical Shielded Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

Corequisites

WELD 1050

WELD 1070 : Overhead Shield Metal Arc Welding

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

Corequisites

WELD 1060

WELD 1090 : Gas Metal Arc Welding

Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1110 : Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1120 : Preparation for Industrial Qualification

Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1040

WELD 1050

WELD 1060

WELD 1070

Corequisites

WELD 1110

WELD 1030

WELD 1150 : Advanced Gas Tungsten Arc Welding

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

Credits 3

Prerequisites

WELD 1110

WELD 1151 : Fabrication Processes

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

Credits 3

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1090

WELD 1030

WELD 1152 : Pipe Welding

Provides the opportunity to apply skills to pipe welding operations.

Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

Credits 4

Prerequisites

WELD 1000

WELD 1010

WELD 1060

WELD 1050

WELD 1070

WELD 1153 : Flux Cored Arc Welding

Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

Credits 4

Prerequisites

WELD 1000

WELD 1010