



**STUDENT HANDBOOK** and  
**ACADEMIC CATALOG**  
2017 - 2018



## MESSAGE FROM THE PRESIDENT

As a unit of the Technical College System of Georgia, we guarantee that our graduates are prepared to work productively and efficiently. We also strive to help our students achieve their educational goals with little or no debt through cost-effective educational options that allow our students to obtain a quality, comparable education in a practical amount of time. By partnering with the local business and industry community through program advisory committees, we ensure that our students are using the latest technology in the classroom equivalent to what is found in the field and learning the techniques used by skilled professionals. Our College boasts expert instructors who obtained true industry experience and credentials in their fields prior to joining the faculty at CGTC.

CGTC is committed to developing a strong workforce and promoting the economic vitality of central Georgia. By supporting local businesses and partnering with community leaders to help recruit new industries to our area, we ensure that our graduates will have the opportunity to put their education to work. Our economic development programs offer customized training and access to Quick Start, Georgia's internationally-acclaimed workforce development program that provides training for new and expanding business and industry across the state.

CGTC is focused on providing a well-rounded collegiate experience to help shape the leaders of tomorrow. We encourage our students to participate in one of the many student organizations and extra-curricular activities Offered: by the College. These opportunities can help foster relationships and build leadership characteristics that can be utilized in any career opportunity.

On behalf of the faculty and staff of CGTC, we invite you to explore our College and let us know how we can help you or your business meet the goals you have set. By working together, we can all positively impact the future of our region and state by promoting and bettering the development of our local workforce.

**Ivan H. Allen, Ed.D.**



## ABOUT THIS CATALOG

This catalog and student handbook is effective for beginning students entering Central Georgia Technical College (CGTC) in the 2017 - 2018 academic year and for any CGTC student returning in the 2017 - 2018 academic year whose catalog has expired. Changes affecting subsequent semesters will be denoted where applicable.

CGTC has prepared this catalog for the convenience of prospective students, current students, faculty, and staff. Information pertaining to course offerings, admissions, financial aid, regulations, and other special services available to the general public is contained in this document. The statements in this catalog are for informational purposes only and are not the basis of a contract between a student and the College. The catalog is published by the Office of Enrollment Services, Marketing, and Public Relations, and is reviewed annually by the Office of Academic Affairs.

While the provisions of this catalog and student handbook will ordinarily be applied as stated, CGTC reserves the right to change any provision listed, including but not limited to: entrance requirements and admissions procedures, courses and programs of study, academic requirements for graduation, fees and charges, financial aid, rules and regulations, and the school calendar, without actual notice to individual students. Every effort will be made to keep students advised of any such changes and to minimize the inconvenience such changes might create for students. It is especially important that each student accept personal responsibility to be informed of all changes, including academic requirements for graduation.

Please visit [www.centralgatech.edu/catalog](http://www.centralgatech.edu/catalog) for the most current information.

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# Admissions

GETTING STARTED AT CGTC

## GETTING STARTED

### Apply for admission

Prospective students can apply to CGTC:

- Online at [www.centralgatech.edu](http://www.centralgatech.edu) (click APPLY TO CGTC on the home page)
- By completing a paper application (available at any CGTC campus or center, or by emailing [admissionoffice@centralgatech.edu](mailto:admissionoffice@centralgatech.edu))
- Via the GAFutures website at [www.gafutures.org](http://www.gafutures.org)
- Via the Georgia Virtual Technical Connection website at [www.gvtc.org](http://www.gvtc.org)

### Submit required documents

- *Application for Admission*
- *Student Agreement* form
- Verify lawful presence

### Next steps

- Pay application fee
- Request official high school/GED transcripts
- Apply for financial aid
- Take the ACCUPLACER college placement test (or provide ASSET, COMPASS, ACCUPLACER®, SAT, or ACT scores if taken within past five years)

## ELIGIBILITY

### Age

You are eligible to attend CGTC if you are 16 years of age or older. High school students applying for the Dual Enrollment program must be 14 years of age or older. Certain academic programs may have different Minimum Age: requirements; please reference the Academic Programs section for requirements for each program of study.

### Previous Academic Experience

To be admitted to CGTC, you must satisfy the requirements of one of the following categories:

#### High School Graduate

High school graduates must submit an official high school transcript that includes the graduation date and 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 TCSG's 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.
- 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.

#### High School Equivalency

Submission of an official transcript reflecting the student has passed an examination the state recognizes as the equivalent of a high school diploma (e.g. GED).

#### Postsecondary Transfer

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.

#### Home Schooled Student (in Georgia)

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).

#### Home Schooled Student (not in Georgia)

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)
- SAT, ACT, ACCUPLACER, or Compass scores that meet or exceed the TCSG and college minimum score requirements for program readiness.

#### Military

Service members of the U.S. Air Force, Army, Coast Guard, Marines, or Navy may submit an official copy of their DD Form 214 indicating high school graduate or equivalent.

*The high school diploma or equivalent requirement is waived for students in a Dual Enrollment high school program or adult education Accelerated Opportunity program.*

## PROGRAM READINESS

All applicants must demonstrate program readiness by submitting test scores from a TCSG-approved placement test or transferring college credits from a regionally- or nationally-accredited post-secondary institution.



# Minimum Placement Test Scores for Program Readiness

Associate of Applied Science Degree	Diploma and Technical Certificate
<b>ACCUPLACER (Standard)</b>	
Reading Comprehension: 64 Sentence Skills: 70 Arithmetic: 34 Elementary Algebra: 57	Reading Comprehension: 55 Sentence Skills: 60 Arithmetic: 34 Elementary Algebra: 41* <i>Elementary Algebra is only required if taking MATH 1013.</i>
<b>ACT</b>	
Reading: 17 English: 16 Math: 19	Reading: 13 English: 12 Math: 17
<b>COMPASS</b>	
Reading: 79 Writing: 62 Math: 26 Algebra: 37	Reading: 70 Writing: 32 Math: 26 Algebra: 28* <i>Algebra is required for some programs.</i>
<b>SAT</b>	
Critical Reading: 450 Math: 440	Critical Reading: 430 Math: 400

\*Algebra is not required for technical certificate programs.

Programs with Adjusted Minimum Scores		
<table border="1"> <tr> <td style="text-align: center;"><b>ACCUPLACER (Adjusted)</b></td> </tr> <tr> <td>Reading Comprehension: 36 Sentence Skills: 30 Arithmetic: 23</td> </tr> </table>	<b>ACCUPLACER (Adjusted)</b>	Reading Comprehension: 36 Sentence Skills: 30 Arithmetic: 23
<b>ACCUPLACER (Adjusted)</b>		
Reading Comprehension: 36 Sentence Skills: 30 Arithmetic: 23		
<ul style="list-style-type: none"> <li>• Animal Healthcare Assistant (AH31)</li> <li>• Automotive Maintenance and Light Repair Technician (ALR1)</li> <li>• Barbering Assistant (BA71)</li> <li>• Basic Shielded Metal Arc Welder (FS31)</li> <li>• Business and Customer Service Technology (BA21)</li> <li>• Certified Construction Worker (CCW1)</li> <li>• Commercial Straight Truck and Passenger Driving (CSQ1)</li> <li>• Commercial Truck Driving (CT61)</li> <li>• Diesel Truck Maintenance Technician (DTM1)</li> <li>• Food Production Worker I (FPW1)</li> <li>• Microsoft Word Application Specialist (MW11)</li> <li>• Prep Cook (PC51)</li> <li>• Residential/Commercial Plumbing Technician (RP11)</li> <li>• Shampoo Technician (ST11)</li> </ul>		

## Placement Testing

The ACCUPLACER test is used to evaluate skills in reading comprehension, sentence skills, mathematics, and elementary algebra. A testing schedule and study resources are available at [www.centralgatech.edu/testingcenter](http://www.centralgatech.edu/testingcenter). The placement test does not determine if an individual can attend CGTC and it is not pass or fail; it simply helps us place students in the college classes that meet their skill level. If the scores do not meet the minimum program requirements for entry, the student will be required to take Learning Support classes.

The placement test is proctored and Offered: at no cost (once the application fee has been paid). In an effort to improve ACCUPLACER scores, students may retest one time per section. Retests must be taken more than seven calendar days after the initial test.

In lieu of ACCUPLACER scores, applicants may submit official SAT, ACT, COMPASS or ASSET scores, provided the scores were obtained within five years of the first day of the semester for which they applied. If the scores do not meet the minimum program requirements for entry, the applicant must take the ACCUPLACER test or complete learning support classes.

## Transfer Credits

Official transcripts must document successful completion of program-level English and math coursework (grade of C or better) and be issued from a regionally- or nationally-accredited post-secondary institution recognized by the United States Department of Education. If the transfer credits do not meet the minimum program requirements for entry, the applicant must take the

ACCUPLACER test or complete learning support classes at CGTC.

## RE-ADMISSION

Previously-enrolled students at CGTC who have not attended CGTC for over one academic year must submit an Application for Re-Admission as a returning student.

- The application fee is waived for all previously-accepted students (assuming that the application fee has already been paid once).
- Students re-entering after meeting conditions of suspension will re-enter on Academic Probation.
- Students are not eligible for readmission until the conditions of their suspension have been met. The suspension period is based on the academic grade point average and satisfactory academic progress.
- Students who are readmitted to the college with a cumulative grade point average less than 2.00 or who have a satisfactory completion rate of less than 67% of course work attempted will reenter on Academic Warning or Academic Probation.
- Students returning after more than one semester must complete all entrance and curriculum requirements posted in the most current catalog.
- Students must provide official transcripts documenting courses completed to be considered for credit for any coursework completed at another institution while not enrolled at CGTC.

## COMPETITIVE SELECTION

See Competitive Selection section of the catalog.

## ACCEPTANCE CATEGORIES

Students accepted to CGTC will be assigned one of the following admissions categories:

### Regular

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

### Provisional

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 students initially admitted on a provisional basis must have satisfactorily completed the necessary prerequisite and learning support course work in order to progress through State Standard Curriculum. Dually/jointly-enrolled students are not eligible for provisional admission status.

### Special Admit

Applicants who wish to take credit coursework, but are not seeking a certificate, diploma, or associate degree are granted special admit status. International students and students on academic suspension may not be admitted under special admit status. Students admitted as a special admit 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.
- Should a special admit student decide to pursue a credential, he/she will then be classified as a transfer student and must meet the requirements set forth in the catalog.

### Pending Admit

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.

- 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.
- Pending admit students 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

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.

## TYPES OF STUDENTS

### Beginning

Students attending any college for the first time (i.e. have never attended any college previously) are classified as beginning students.

### Returning Students

Students who previously attended CGTC (or Middle Georgia Technical College) and have not attended another college since attending CGTC/MGTC are classified as returning students. Students who wish to re-enter CGTC after a term of non-enrollment must reapply for admission through the Office of Admissions. Students applying to return must complete a Re-Admission Application.

Students dismissed or suspended from CGTC may apply to re-enter at the beginning of any term following the dismissal or suspension period. Reapplication does not guarantee acceptance. Students reapplying for admission after their program curriculum has changed will be required to meet the requirements of the new curriculum.

### Transient Students

A student in good academic standing at another accredited institution may be permitted to enroll as a transient student at CGTC in order to complete work that will be transferred to the home institution.

1. Students must submit an application for transient admissions through either CGTC or the Georgia Virtual Technical Connection.
2. Students must submit a Transient Agreement Letter from their home institution. The Transient Agreement Letter should verify that the student is in good standing and should list the courses the student is eligible to take. A current Transient Agreement Letter is required for each term of

- enrollment.
3. Transient students must pay all CGTC fees; however, if the transient student is from another college within the Technical College System of Georgia and also currently enrolled at their home college during the same term, the student will not be required to pay the technology fee at CGTC.
  4. Transient students must submit a Request for Transcripts form at the end of the term to have their grade sent back to their home institution.

### Transfer Students

Applicants to CGTC who have previously been enrolled at another accredited post-secondary institution will be considered for admission as transfer students. Applicants must meet all admissions requirements of the program for which they are applying. Transfer students will be admitted as program ready or provisional based on CGTC's admission requirements. Transfer students will be admitted in good academic standing upon their initial semester if their standing at the previous institution was good standing. In all other cases, they will be admitted on academic warning or academic probation. To obtain good academic standing, transfer students must satisfy the conditions of CGTC's academic progress policy.

### Transfer Credit

Transfer students may receive advanced placement based on coursework successfully completed (grade of "C" or higher) at the previous institution(s) that is essentially the same in content as those required for the program of study at CGTC. Official transcripts must be provided for any courses and any institution for which transfer credit is requested. All transfer courses follow the same guidelines for expiration as course work completed at CGTC (see Course Expiration) and must be approved by the Registrar. Based on certain program criteria, other course time limits may apply. A maximum of seventy-five percent (75%) of program course work may be transferred from other institutions.

Students wishing to transfer credit must have an official transcript sent to CGTC Registrar's Office. The Registrar's Office will award transfer credit for applicable courses and may consult with appropriate faculty in the final decision of transfer credit.

### International Students

Prospective students from foreign countries must begin the application process 30-60 days prior to the semester for which they plan to enroll. All citizens of a foreign country who wish to attend CGTC and receive a *Form I-20, Certificate of Eligibility for Non-immigrant Student Status*, must complete the following steps:

1. Submit a completed application for admission, along with the non-refundable application fee.
2. Submit a notarized *Affidavit of Financial Support for International Students* form (the form is available at [www.centralgatech.edu/international](http://www.centralgatech.edu/international) or from the Office of Admissions) or a letter from a banking institution documenting sufficient funds to finance education, living expenses and other associated costs of an

education

3. Provide a copy of applicant's passport (and passport for any of applicant's dependents)
4. Provide a copy of the applicant's visa
5. Provide a copy of an I-94 form (you can retrieve and print your most recent I-94 form at [i94.cbp.dhs.gov](http://i94.cbp.dhs.gov)).
6. Submit a copy of TOEFL test scores.
7. Submit an official copy of transcript from high school (or high school equivalent). Transcript(s) must be translated into English and evaluated by an approved evaluation services (a list of approved contacts for transcript evaluation is available at [www.centralgatech.edu/international](http://www.centralgatech.edu/international)).
8. Take the ACCUPLACER placement test (or provide a copy of ACCUPLACER, COMPASS, ACT, or SAT scores if the test has been taken within the past five years).

#### Please note that international students:

- are not eligible to be employed outside of the College while on a student VISA, unless it is a campus job.
- must provide an affidavit of support documenting sufficient funds to finance their education, living expenses, and other associated costs of their education.
- must contact the designated school official each semester to confirm their status and before withdrawing from classes, the College, or leaving the country.
- are required to enroll full-time (12 credit hours) each semester of attendance.
- may only take one online class each semester, unless the student is enrolled in their final semester prior to graduation.
- do not qualify for any type of financial aid.
- must pay tuition that is four times the rate of in-state Georgia residents.
- must assume the responsibility to communicate any difficulties in their studies at CGTC to the designated school official.

[www.centralgatech.edu/international](http://www.centralgatech.edu/international)

### High School Students

#### Dual Enrollment

The Dual Enrollment program offers high school students the opportunity to earn both college credit and high school credit toward graduation, at little or no cost to the student. Hours taken in the Dual Enrollment program do not count towards the student's HOPE cap hours. Students must meet CGTC's admissions requirements and minimum testing requirements to enter the program.

High school students can take occupational classes within a CGTC diploma program or technical certificate of credit and get a jump start on an exciting career and gain hands-on experience. Course offerings vary by county; if the courses are approved by the high school, full tuition, fees, and textbooks are at no charge to the

student.

High school students can take degree-level core courses through CGTC and earn college and high school credit simultaneously. One college semester course is equivalent to one Carnegie unit at the high school. If the courses are approved by the high school, full tuition, fees, and textbooks are covered at no charge to the student.

Students enrolled in the Dual Enrollment program must:

- apply for dual enrollment at [www.gafutures.org](http://www.gafutures.org) each semester
- meet Satisfactory Academic Progress (SAP) in order to receive dual enrollment funding each term. Students meet SAP requirements by maintaining a 2.0 grade point average AND passing 67% or more of attempted coursework.

### Joint Enrollment

High school students can take college courses under the Joint Enrollment program and gain **college credit only**. Students can either self-pay for these courses, or use HOPE Grant funds. Hours taken under the Joint Enrollment program using the HOPE Grant count against a student's HOPE hours cap. Joint enrollment students are responsible for the cost of textbooks.

### Private High School Students

Students attending an accredited private school are eligible for enrollment under CGTC's admissions requirements. The private school's accreditation must be approved by the Technical College System of Georgia. If the private school is not a participating school of the Dual Enrollment program, private school students would not be eligible for dual enrollment funds; however, they could enroll as Joint Enrollment students.

### Home School Students

Home school students are eligible for joint or dual enrollment if they meet CGTC's admissions requirements. If the home study program is not accredited by an agency specified in the approved list, the parent must furnish proof of compliance with B.C. 20-2-690. Recognizing the uniqueness of each individual student, we encourage home school students and parents to contact the Office of High School Initiatives for more information.

Homeschool students are eligible for the Dual Enrollment program as long as they meet the college's minimum testing requirements for their program and complete the paper Dual Enrollment Application each semester they are enrolled. Homeschool students are required to submit an annual *Declaration of Intent to Homeschool* and complete the *Participation Agreement for Homeschool Students* to their CGTC High School Coordinator.

[www.centralgatech.edu/highschool](http://www.centralgatech.edu/highschool)

### Senior Citizens

Georgia residents 62 years of age or older may request a waiver of tuition charges for regular and institutional credit courses through the Office of Admissions. Mandatory fees are not eligible for this waiver. This

policy does not apply to continuing education courses, noncredit courses, or seminars. Tuition is adjusted after the student has registered for classes. Senior citizens must meet all other admission requirements as required in the college catalog and pay all fees other than tuition.

Please note that if space does not permit, the student will be dropped from the class and a refund will be issued for any fees paid by the student.

### Re-Entry Students

CGTC offers a limited number of technical certificates of credit programs through an intergovernmental agency agreement between the College and the Georgia Department of Corrections (GDC). The programs, offered at selected GDC sites and denoted by GDC and/or YDC in the Location(s) Offered section for each program, are intended to reduce inmate recidivism and enhance post-release employability. The College's admissions requirements are adhered to for program admission in order to maintain and promote a quality educational experience for each student. These technical certificate of credit programs are credit-bearing programs and awards are administered through the Registrar's Office. Re-entry students do not participate in Title IV federal financial aid programs or the HOPE Grant program.

# Paying for College

# EXPENSES

## Tuition and Fees

All students are responsible for paying their tuition and fees by the first day of the semester or mini-semester. Tuition and fees may be paid with cash, check, credit/debit card, financial aid, third party (employer, public agency or support program), Titans FlexPay automatic payment plan, or by any combination listed. Payments can be made in person at the cashier window on any campus, by mail, or online in BannerWeb with a credit card, debit card, or check. All charges remain the responsibility of the student.

Students that have not paid their tuition and fees are subject to being purged (removed) from classes. Students who are not purged from class are responsible for paying all tuition and fees. No transcripts, grades, applications, or attendance reports will be released for any student who has an outstanding obligation to the College including tuition, fees, fines, institutional charges, returned checks, or academic obligations.

Tuition/fees are subject to change at the beginning of any semester.

### Credit Hour Tuition

Credit Hour	In-State Resident	Out-of-State Resident	International/ Foreign Resident
1	\$89.00	\$178.00	\$356.00
2	\$178.00	\$356.00	\$712.00
3	\$267.00	\$534.00	\$1,068.00
4	\$356.00	\$712.00	\$1,424.00
5	\$445.00	\$890.00	\$1,780.00
6	\$534.00	\$1,068.00	\$2,136.00
7	\$623.00	\$1,246.00	\$2,492.00
8	\$712.00	\$1,424.00	\$2,848.00
9	\$801.00	\$1,602.00	\$3,204.00
10	\$890.00	\$1,780.00	\$3,560.00
11	\$979.00	\$1,958.00	\$3,916.00
12	\$1,068.00	\$2,136.00	\$4,272.00
13	\$1,157.00	\$2,314.00	\$4,628.00
14	\$1,246.00	\$2,492.00	\$4,984.00
15	\$1,335.00	\$2,670.00	\$5,340.00

\*Commercial Truck Driving tuition is \$132/credit hour.

Students must submit one of the following types of documentation to verify lawful presence in the United States and request the in-state tuition rate, if applicable:

- Current driver's license issued by the state of Georgia after January 1, 2008
- Current ID issued by the state of Georgia after January 1, 2008
- Current driver's license or ID issued by a state that verifies immigration status and only issues to persons lawfully present in the United States:
  - Alabama: Issued after August 1, 2000
  - Florida: Issued after January 1, 2010
  - South Carolina: Issued after November 1, 2008

- Tennessee: Issued after May 29, 2004
- Certified U.S. birth certificate showing the student was born in the U.S. or a U.S. territory. A photocopy is not acceptable.
- Approved, completed FAFSA for the current financial aid year
- Current, valid Permanent Resident Card (USCIS form 1-151 or 1-551)
- Current, valid military identification card for active duty soldiers or veterans
- U.S. Certificate of Birth Abroad issued by the Department of State (DS-1350) or a Consular Report of Birth Abroad (FS-240)
- Current U.S. Passport
- U.S. Certificate of Citizenship (USCIS form N-560 or N-561)
- U.S. Certificate of Naturalization (USCIS form N-550 or N-570)

Applicants that do not submit an acceptable form of documentation to verify lawful presence in the United States will not be eligible for in-state tuition, regardless of how long they have lived in Georgia. Applicants and students that are initially classified as out-of-state can request to have their residency changed to in-state once verification requirements have been met.

### In-State Tuition Rates

Students (or parent/guardian, if the student is a dependent) that have lived in Georgia for 12 consecutive months or more may request the in-state tuition rate. Students must be lawfully present in the United States and meet the in-state tuition requirements as outlined in TCSG Board Policy and Procedure 6.2.2p. to be eligible for the in-state tuition rate. Students requesting the in-state tuition rate must provide proof of Georgia residency.

### Out-of-State Tuition Rates

Students who are residents of the United States but do not otherwise qualify as Georgia residents will pay the out-of-state tuition rate. This student is defined as a person who has not established domicile in the State of Georgia for a period of at least 12 months prior to the first day of classes for the term for which the person is intending to enroll. These students are charged tuition at a rate twice that of those eligible for in-state-tuition rate.

### International/Foreign Tuition Rates

Those students who are not eligible for either the in-state tuition rate or the out-of-state tuition rate are charged four times the amount of the in-state rate.

### Required Student Fees per Semester

Campus Safety .....	\$25.00
Health and Fitness .....	\$30.00
Instructional and Technology Support.....	\$105.00
Institutional Fee .....	\$55.00
Registration Fee .....	\$60.00
Student Accident Insurance.....	\$6.00
Student Activities.....	\$40.00
<b>Total Required Fees.....</b>	<b>\$321.00</b>

## Explanation of Required Fees

- **Campus Safety:** Supports CGTC’s security department to provide a safe campus environment.
- **Health and Fitness:** Support CGTC’s intercollegiate athletic program and for operational costs associated with the College’s health and fitness facilities.
- **Instructional and Technology Support:** Increases instructional resources and maintains technology to support student learning.
- **Institutional Fee:** Supports administrative, instructional, and operational costs of the College.
- **Registration Fee:** Covers administrative costs associated with the student registration process.
- **Student Accident Insurance:** All students enrolled in credit hour programs are provided school-time only accident insurance. Premiums are paid from the student accident insurance fee. A copy of the insurance plan is on file in the business office and students are given a copy of the plan whenever a claim form is requested. Claim forms are available from your instructor; the student must file the claim form directly with the insurance company’s claims office. Students should read the policy to understand any potential out-of-pocket expenses. Students are responsible for any personal medical costs incurred while enrolled at CGTC.
- **Student Activities:** Used for providing resources for student-sponsored and endorsed activities, campus activity days, and student organizations.

## Other Fees

Application for Admission (one-time nonrefundable) .....	\$25.00
Degree/Diploma/Certificate Reprint .....	\$25.00
Exemption Exam (25% of tuition) .....	varies
Graduation Application.....	\$35.00
Late Registration .....	\$45.00
Parking Ticket.....	\$5.00
Replace Parking Decal.....	\$5.00
Replace Student ID.....	\$5.00
Returned Check.....	\$30.00
Transcript Request (Official Copy) .....	\$5.00
Transcript Request (Official Copy, Expedited Delivery) .....	\$25.00

## Liability Insurance

Students enrolled in selected programs must also purchase personal liability insurance. These programs include Cosmetology, Barbering, Early Childhood Care and Education, and all medical/health programs. The liability insurance fee must be paid when the student signs up for a class that requires clinical coursework. Failure to pay the liability insurance fee will result in the student not being able to participate in the program. The fee is non-refundable. Please see your advisor for further details concerning this requirement.

EMT and Paramedic Programs.....	\$46.00
All Other Applicable Programs.....	\$11.00

[www.centralgatech.edu/tuition](http://www.centralgatech.edu/tuition)

## Textbooks and Materials

It is recommended that students purchase required books, tools, uniforms and other equipment/supplies appropriate to their program of study as outlined in the course syllabus for each program.

## POLICIES

### Check Policy

CGTC accepts personal checks for tuition and fees for the exact amount due. Separate checks are required for bookstore purchases. No personal checks are cashed by the College. A \$30.00 fee is charged for returned checks.

### Refunds

#### Tuition and Fees

A student enrolled in a credit hour program, either day or evening, may receive a full refund of tuition and fees if the student drops through the third day of the semester. No refund will be given for withdrawals after the third day of the semester.

Refunds, when due, will be made via BankMobile®, which gives students two options for receiving refunds:

- Deposit to a OneAccount, a non-interest bearing, internet-only checking account serviced by BankMobile®
- Deposit to another account

BankMobile® will send each student a welcome package to the address that CGTC has on file for the student. Students can then visit [myonemoney.com](http://myonemoney.com) to set up preferences for refunds and alerts.

#### CGTC Bookstore

The CGTC Bookstore allows a full refund on unopened/unused course materials/textbooks (receipt is required for returns). The last day for refunds will be printed on the receipt and also posted in the CGTC Bookstore each semester. Course materials purchased after the campus specific deadline must be returned within seven business days of purchase for a full refund. Course materials purchased during the last week of classes or final exams are not refundable. Brytewave digital textbooks must be returned within 14 days of purchase for a full refund. Contact the CGTC Bookstore for details regarding the return policies.

#### Financial Aid

Financial aid recipients, please see the Financial Aid Refund Policy.

## PAYMENT PLAN

### Titans FlexPay

CGTC has partnered with Nelnet, a leading educational planning and financing company that provides billing and customer services for students, to offer the Titans FlexPay automatic plan.

Titans FlexPay is not a loan program. There are no interest or finance charges, and there is no credit check. For a non-refundable enrollment fee (per semester), Nelnet will pay your tuition and fees and provide you with a monthly payment plan divided into several payments.

Payments to Nelnet may be made by a direct transfer from your bank account or by credit/debit card. Your down payment and enrollment fee are processed immediately upon signing up, and your monthly payments are processed automatically by Nelnet on the 5th of each month.

[www.mycollegepaymentplan.com/CGTC](http://www.mycollegepaymentplan.com/CGTC)

## FINANCIAL AID

CGTC offers a comprehensive financial aid program to assist students with the cost of their education. All students are encouraged to apply for financial aid. After a student submits a completed financial aid application and required documents, the student's eligibility is determined according to federal and state regulations and institutional policies. The actual financial aid that a student is eligible to receive is related to the student's financial aid status, chosen program of study, the total number of credit hours enrolled in each semester, and academic standing and history. Any change in a student's financial aid status or enrollment information can affect the financial aid awarded to the student.

Financial aid is not automatically awarded; students must complete the necessary steps to accept awards so that aid can be applied to accounts. CGTC is required to follow federal regulations when determining a financial aid award and reserves the right to adjust an award at any time (*students can view all adjustments in BannerWeb*).

CGTC's Office of Financial Aid is available to assist students throughout the application process. For complete and current financial aid information, please visit [www.centralgatech.edu/financialaid](http://www.centralgatech.edu/financialaid).

### Financial Aid Eligibility

To be considered for federal or state financial aid a student must:

- Complete the Free Application for Federal Student Aid (FAFSA) each year (the FAFSA typically opens in October of each year)
- Be enrolled as a regular student in an eligible program or major
- Be a U.S. citizen or eligible non-citizen

- Have a high school diploma (or equivalent) or pass an approved Ability-to-Benefit Test
- Make satisfactory academic progress
- Not be in default/overpayment/exceed limit on any type of student loan
- Not owe a refund on any type of federal or state aid
- Register with Selective Service, if required
- Have a valid Social Security Number
- Have resolved any drug conviction issue according to federal regulations.

## How to Apply for Financial Aid

The financial aid year begins with fall semester, includes spring semester, and ends with summer semester.

1. Create an FSA ID online at [www.studentaid.gov/fsaid](http://www.studentaid.gov/fsaid).
2. Complete your *Free Application for Federal Student Aid (FAFSA)* at [fafsa.ed.gov](http://fafsa.ed.gov) and **answer ALL questions accurately** (incorrect or missing information will delay the processing time of your financial aid). CGTC's school code is **005763**.
3. After you apply, you will receive a *Student Aid Report (SAR)* via email; review this and make sure that everything is correct. CGTC will also receive a copy and begin processing your financial aid (*it can take up to five business days for CGTC to receive the information*).
4. Check BannerWeb to see if you need to submit additional documentation in order for your award to be processed. The Financial Aid Office cannot process your award until you have submitted all required documentation.
5. View your financial award, accept terms and conditions, and accept your financial aid award in BannerWeb.

Students will be notified about their financial aid award approximately 2-3 weeks after successfully submitting the FAFSA.

## Important Dates

All important financial aid dates, including application deadlines, refund disbursements, loan dates, and bookstore availability dates for each semester are available online at [www.centralgatech.edu/financialaid/important-dates](http://www.centralgatech.edu/financialaid/important-dates).

## Types of Aid Available

### Federal Pell Grant

The Pell Grant is a federal funded grant for undergraduate students with financial need. This grant does not have to be repaid unless the student withdraws completely from classes and may owe a refund.

The maximum annual Pell award amounts for zero



estimated family contribution (EFC) students for the 2017-2018 award year is \$5,920.00. The annual Pell amount for non-zero EFC students is prorated based on the College's annual cost of attendance and the student's EFC that is calculated by the Department of Education based on the information reported on the FAFSA. Award amounts will also be adjusted based on the actual number of hours in which the student is enrolled per term.

### Federal Student Equal Opportunity Grant (SEOG)

The SEOG Program provides non-repayable financial aid to students who demonstrate exceptional financial need and meet federal regulations and institutional policy. The Department of Education determines the amount of FSEOG allocations that are made available for each institution. These funds are limited each year and, due to the amount of eligible students and CGTC's commitment to assist as many students as possible with this award, funding available for eligible students may run out. Funds awarded to students that did not attend a term are redistributed to eligible students that attend future terms within the academic year.

### Georgia's HOPE Program

Georgia's HOPE program provides assistance with a portion of tuition to Georgia residents attending Georgia institutions of higher learning. The HOPE program does not cover fees or textbooks. The HOPE program includes four different categories:

1. HOPE Scholarship: available to eligible students enrolled in an associate degree program of study.
2. HOPE Grant: available to eligible students enrolled and earning credit in a credit hour diploma or technical certificate program of study.
3. HOPE GED® Grant: available to eligible residents who have obtained their GED® and enroll in a post-secondary institution. The HOPE GED® Grant is a one-time award to those who qualify.
4. HOPE Career Grant: Students receiving HOPE Grant funds may also be eligible for funding from the HOPE Career Grant. A student's HOPE Career Grant award is a fixed amount per term based on the student's program of study and hours enrolled.

Eligibility and residency requirements for each HOPE program are determined by state regulations. Regulations are subject to change. For more detailed information about state grants, scholarships, and programs, visit [www.gafutures.org](http://www.gafutures.org).

### Federal Work Study (FWS)

Federal Work Study is a federal program designed to provide employment opportunities within various departments around the college to eligible students. FWS is federally-funded to students based on determined financial need. Students will work in pre-approved positions on or off campus. Available positions must include community service positions; at least one position must be a reading tutor for children in a reading tutoring project or performing family literacy activities in a family literacy project. Students will be paid at least the current national minimum wage rate. To apply for a FWS position, contact the Office of Career Services.

### Veterans' Benefits

CGTC is dedicated to providing excellent customer service and assistance to veterans, active duty military, and military dependents. A certifying official is available at both the Warner Robins and Macon campuses to certify enrollment of students who qualify for military benefits. Certifying officials may be contacted at by calling (478) 218-3392 (Warner Robins) or (478) 757-6621 (Macon). Please note that CGTC cannot make the determination of one's eligibility for VA benefits; for eligibility, please contact the Department of Veteran Affairs at [www.gibill.va.gov](http://www.gibill.va.gov).

### Workforce Innovation and Opportunity Act (WIOA)

The Workforce Innovation and Opportunity Act (WIOA) Program is a federally-funded program that provides employability training to the economically disadvantaged and dislocated workers. WIOA provides assistance with tuition and fees, textbooks and required supplies, uniforms, and tools. Additional support services are available based on individual eligibility and WIOA policy. The WIOA process involves numerous selection criteria. Selection is also based on availability or quarterly openings and funding.

## Financial Aid Refunds

Financial aid adjustments are made in accordance with the federal and state regulations and institutional policy. Financial aid awards are adjusted based on the guidelines of the particular fund. A specific pro-rata formula, mandated by the U.S. Department of Education, is used to determine the amount of federal student financial aid assistance that a student has received and/or earned when he/she withdraws during a period of enrollment (semester). The return of funds requirement is applied to students withdrawing on or before the 60 percent point of the period of enrollment. Any amount that the student must return is a grant overpayment and the student is held responsible for the repayment of assistance that he/she was determined not eligible to receive.

Additionally, in the case of an award being made to a student and for whatever reason it is determined he/she is not eligible for the assistance, the student is held responsible for any overpayment or charge incurred. To withdraw from a class or withdraw completely for the semester, the student must officially withdraw from the class in BannerWeb. The Financial Aid Office will be notified and required adjustments will be made to the student's financial aid award(s).

### Disbursement of Financial Aid Refunds

A Federal Student Aid (FSA) credit occurs whenever the college disburses FSA program funds to a student's account and the total amount of those FSA funds exceeds the student's allowable charges. The credit balance must be paid directly to the student no later than 14 days after either the date the balance occurred on the student's account or the first day of classes if the credit balance occurred on or before the first day of class of the term. CGTC has selected BankMobile® to deliver financial aid refunds to students.

[www.centralgatech.edu/financialaid/refunds](http://www.centralgatech.edu/financialaid/refunds)

## Things That May Affect Financial Aid

### Dropping and withdrawing from class

Students may drop classes through the third day of the semester with no academic penalty, no tuition or fee charges, and no financial aid awarded. Students must drop the class(es) in BannerWeb.

After the third day of the semester, students not able to complete a course(s) must officially withdraw from the class(es) using the **Withdraw from Class(es)** form in the Student Portal.

If you withdraw, or are dropped (administratively withdrawn) from all classes due to non-attendance (based on the date that CGTC determines you stopped attending classes):

- You will be assigned a grade of W for each course you withdraw.
- You will be charged full tuition and fees based on the hours enrolled; according to state policy, you will not receive a refund for any tuition and fees.
- Title IV financial aid (Pell Grant, SEOG, etc.) will be prorated based on the amount of aid you earned for the period you were enrolled. Unearned Title IV aid will be returned to the Department of Education as required by Title IV regulations.
- You will be responsible for paying the balance of tuition, fees, and book charges not covered by the prorated Title IV and other aid received.

### Verification

Federal regulations require all institutions to confirm the accuracy of information submitted on the FAFSA. This process is called verification. The U.S. Department of Education selects applicants for the verification process. The Financial Aid Office at Central Georgia Technical College reserves the right to select additional applicants for the process of verification at its discretion. This discretionary selection may be generated due to conflicting information or due to concerns that data may not be accurate or complete.

### Satisfactory Academic Progress (SAP)

In order to receive student financial aid under the programs authorized by Title IV of the Higher Education Act as amended, students must make satisfactory academic progress in the course of study they are pursuing. Students must select a program and make qualitative and quantitative progress toward completion of that program in accordance with the college's academic policies.

- Qualitative: a student must maintain a cumulative GPA of 2.0 or higher
- Quantitative: The maximum time frame (pace) for a student to complete a program cannot exceed 150% of the published length of the program for which the student is enrolled. In order to meet this standard, a student must complete and pass at least 67% of all credit hours attempted. Courses earned include grades of A, B, C, D or F. Courses attempted include grades of A, B, C, D, F, W, I, or IP. Attempted learning support courses are not

included in this measurement.

Financial Aid students who fail to make satisfactory progress may be declared ineligible for financial aid at CGTC until the deficiency has been removed. Financial Aid recipients are expected to maintain satisfactory progress in accordance with the college's academic standing policies described in the Academic Information section. A student failing to demonstrate satisfactory progress may be placed on academic warning or probation for the following semester.

Although CGTC may readmit students on academic probation, this type of readmission may not qualify students to receive financial aid.

A student may appeal a decision related to failure to make satisfactory progress on specified relevant grounds. The student shall appeal in writing to the Financial Aid Director within 10 days after notification of the decision with which he/she disagrees. Any dispute a student may have with regards to a semester financial aid award amount or institutional charge (tuition, fee, book) on his/her record may appeal in writing within 10 days of the last day of the specific semester the award or charge occurred. The student will receive a notification by mail of the decision results within 30 days of the date the appeal was submitted.

### Student Loan Status

A student in default on a Federal Student Loan or Direct Loan is not eligible to receive Title IV aid until the default status is resolved by repayment in full; payment of at least six consecutive, full, voluntary payments on time to the loan holder; or loan rehabilitation. To be eligible for state aid, the defaulted loan(s) must be paid in full.

### Drug Conviction

A federal or state drug conviction (but not a local or municipal conviction) can disqualify a student for Title IV funds.

### Unusual Enrollment History

The Department of Education prevents fraud and abuse in the Federal Pell Grant Program by identifying students with unusual enrollment histories (UEH). The UEH is a specific enrollment pattern in which students attend an institution long enough to receive Title IV credit balance funds, leave without completing the enrollment period, enrolls at another institution, and repeats the pattern of enrollment just long enough to collect another Title IV balance without having earned any academic credit. There may be cases where students have a legitimate reason for enrollment at multiple institutions. However, such an enrollment history requires a review to determine whether there are valid reasons for the UEH.

### Time Limitation on Direct Subsidized Loan Eligibility for First-Time Borrowers

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) added a new provision to the Direct Loan statutory requirements that limits a first-time borrower's eligibility for Direct Subsidized Loans to a period not to exceed 150 percent of the length of the borrower's educational program. Under

certain conditions, the provision also causes first-time borrowers who have exceeded the 150 percent limit to lose the interest subsidy on the Direct Subsidized Loans. Only first-time borrowers on or after July 1, 2013 are subject to the new provision.

[www.centralgatech.edu/financialaid](http://www.centralgatech.edu/financialaid)



# Student Progress and Resources

# 2017-2018 ACADEMIC CALENDAR

Dates are subject to change. The most current dates and deadlines, including important dates for students and college holidays, is available at [www.centralgatech.edu/calendars](http://www.centralgatech.edu/calendars).

## 2017 Fall Semester (201812)

August 16, Wednesday	Fall Semester Begins – Full and S1
August 16 – 18, Wednesday – Friday	Drop/Add Period/Refund Deadline – Full and S1
September 4, Monday	Labor Day Holiday (College Closed)
September 18, Monday	Last Day to Withdraw with a W grade-S1
October 6, Friday	Student Holiday (Faculty/Staff Professional Development)
October 10, Tuesday	Midterm – Full Session/S1 Ends
October 11, Wednesday	Registration S2
October 12, Thursday	S2 Begins
October 16, Monday	Drop/Add Ends S2
October 23, Monday	Last Day to Withdraw with a W grade – Full Session
October 30, Monday	Spring Semester Registration Opens* (Current & Returning Students)
November 10, Friday	Veteran’s Day Holiday Observed (College Closed)
November 13, Monday	Spring Semester Registration* (New Students)
November 15, Wednesday	Last Day to Withdraw with a W grade – S2
November 20 – 21, Monday – Tuesday	Student Holiday
November 22 – 24, Wednesday – Friday	State Holiday (College Closed)
December 8, Friday	Last Day of Classes – Full Session
December 11 – 13, Monday – Wednesday	Final Exams
December 13, Wednesday	S2 Ends/Fall Semester Ends

## 2018 Spring Semester (201814)

January 8, Monday	Spring Semester Begins – Full and S1
January 8 – 10, Monday – Wednesday	Drop/Add Period/ Refund Deadline – Full and S1
January 15, Monday	Martin Luther King Jr. Holiday (College Closed)
February 8, Thursday	Last Day to Withdraw with a W grade-S1
February 16, Friday	Student Holiday (Faculty/Staff Professional Development)
March 2, Friday	Midterm – Full Session/S1 Ends
March 5, Monday	S2 Registration
March 6, Tuesday	S2 Begins
March 8, Thursday	Drop/Add Ends S2
March 12, Monday	Summer Semester Registration Opens* (Current & Returning Students)
March 15, Thursday	Last Day to Withdraw with a W grade – Full Session
March 26 – 30, Monday – Friday	Spring Break/Student Holiday
April 2, Monday	Summer Semester Registration* (New Students)
April 13, Friday	Last Day to Withdraw with a W grade – S2
May 1, Tuesday	Last Day of Classes – Full Session
May 2-4, Wednesday-Friday	Final Exams
May 3, Thursday	S2 Ends
May 4, Friday	Full session/Spring Semester Ends
May 4, Friday	Graduation

## 2018 Summer Semester (201816)

May 17, Thursday	Summer Semester Begins
May 17 – 21, Thursday – Monday	Drop/Add Period/Refund Deadline
May 28, Monday	Memorial Day Holiday (College Closed)
May 31, Thursday	Minimester Begins
June 18, Monday	Fall Semester Registration Opens* (Current & Returning Students)
June 19, Tuesday	Midterm
June 27, Wednesday	Last Day to Withdraw with a W grade-Full Session
July 2 – 6, Monday – Friday	Summer Break/Student Holiday
July 9, Monday	Fall Semester Registration* (New Students)
July 10, Tuesday	Last Day to Withdraw with a W grade-minimester
July 26, Thursday	Last Day of Classes
July 27-31, Friday-Tuesday	Final Exams
July 30, Monday	Minimester Session Ends
July 31, Tuesday	Full Session /Summer Semester Ends

# INFORMATION DIRECTORY

## Warner Robins (Main) Campus

(478) 988-6800 or (800) 474-1031

80 Cohen Walker Drive, Warner Robins, GA 31088

Academic Success Center .....	(478) 218-3727
Admissions.....	(478) 988-6850
Adult Education and GED.....	(478) 218-3769
Barbering Services .....	(478) 218-3310
Bookstore.....	(478) 988-6805
Campus Police and Security.....	(478) 988-6993
Care Center .....	(478) 218-3380
Career Services .....	(478) 218-3764
Cashier .....	(478) 218-3387
Continuing Education.....	(478) 988-6852
Cosmetology Services .....	(478) 988-6913
Dental Hygiene Services.....	(478) 218-3348
Distance Education .....	(478) 757-2507
Financial Aid.....	(478) 988-6871
Foundation.....	(478) 218-3311
High School Initiatives.....	(478) 218-3236
IT Helpdesk and Technology .....	(478) 757-3519
Library Services .....	(478) 988-6863
Military and Veterans Financial Aid .....	(478) 218-3392
Military and Veterans Services.....	(478) 218-3909
Registrar.....	(478) 757-5294
Special Populations.....	(478) 218-3229
Testing Center .....	(478) 218-3390
Titans Cafe .....	(478) 218-3783

## Macon Campus

(478) 757-3400 or (800) 430-0135

3300 Macon Tech Drive, Macon, GA 31206

Academic Success Center .....	(478) 757-3674
Admissions.....	(478) 757-3403
Adult Education and GED.....	(478) 757-6669
Barbering Services .....	(478) 757-3486
Bookstore.....	(478) 757-3409
Campus Police and Security.....	(478) 757-3453
CARE Center.....	(478) 757-5295
Career Services .....	(478) 757-3431
Cashier .....	(478) 757-3412
Continuing Education.....	(478) 757-3445
Cosmetology Services .....	(478) 757-3420
Dental Hygiene Services.....	(478) 757-3488
Distance Education .....	(478) 757-2507
Financial Aid.....	(478) 757-3422
Foundation.....	(478) 757-3503
High School Initiatives.....	(478) 218-3709
IT Helpdesk and Technology .....	(478) 757-3519
Library Services.....	(478) 757-3594
Military and Veterans Financial Aid .....	(478) 757-3662
Military and Veterans Services.....	(478) 218-3909
Registrar.....	(478) 757-5294
Special Populations.....	(478) 476-5137
Testing Center .....	(478) 757-2508
Titans Cafe .....	(478) 475-5144

## Milledgeville Campus

(478) 445-2300

54 Highway 22 West, Milledgeville, GA 31061

Academic Success Center .....	(478) 445-2343
Admissions.....	(478) 445-2303
Adult Education and GED.....	(478) 445-5669
Barbering Services .....	(478) 445-3016
Bookstore.....	(478) 445-7281
Campus Police and Security.....	(478) 445-2350
CARE Center.....	(478) 445-5295
Career Services .....	(478) 445-2305
Cashier .....	(478) 445-2303
Cosmetology Services .....	(478) 445-4552
Distance Learning .....	(478) 757-2507
Financial Aid.....	(478) 445-2317
Foundation.....	(478) 757-3503
High School Initiatives.....	(478) 757-3493
IT Helpdesk and Technology .....	(478) 757-3519
Library Services .....	(478) 445-2333
Military and Veterans Services.....	(478) 218-3909
Registrar.....	(478) 757-5294
Special Populations.....	(478) 476-5137
Testing Center .....	(478) 445-2305

## Crawford County Center

640 Georgia Highway 128, Roberta, GA 31078  
(478) 836-6001

## Georgia VECTR Center

1001 S. Armed Forces Blvd, Warner Robins, GA 31088  
(478) 218-3900

## Hawkinsville Workforce Development Center

243 Warner Robins Highway, Hawkinsville, GA 31036  
(478) 783-3017

## Jones County Center

161 West Clinton Street, Gray, GA 31032  
(478) 986-4370

## Monroe County Center

433 Hwy 41, South, Forsyth, GA 31029  
(478) 992-2717

## Peach County Workforce Development Center

425 James E. Khoury Drive, Fort Valley, GA 31030  
(478) 218-3739

## Putnam County Center

580 James Marshall Bypass, Eatonton, GA 31024  
(706) 923-5000

## Twiggs County Center

952 Main Street, Jeffersonville, GA 31044  
(478) 945-2206

[www.centralgatech.edu](http://www.centralgatech.edu) | [info@centralgatech.edu](mailto:info@centralgatech.edu)

## REGISTRATION

Registration dates for the upcoming semester are available online at [www.centralgatech.edu/calendars](http://www.centralgatech.edu/calendars). Currently-enrolled and returning students are Offered: priority registration, which allows them to meet with their advisor and sign up for classes early.

Students are encouraged to meet with an advisor and sign up for classes as quickly as possible in order to secure the classes needed and avoid the classes being closed or filled. Some classes offer a waitlist option.

### Basic Registration Steps

- 1. Clear holds:** You must clear any holds on your account before registering for classes. The balance for Business Office holds such as past-due tuition/fees must be paid before you can sign up for classes.
- 2. Meet with your advisor:** You must meet with your advisor each semester in order to sign up for classes. Your advisor will help plan your schedule, make sure that you are on the right track to complete your program, and will also provide you with the alternate PIN, which you will need to sign up for classes. You can email your advisor directly through the Student Portal.
- 3. Sign up for classes:** You can sign up for classes using BannerWeb. Once you sign up for classes, view your class schedule in BannerWeb to make sure that it is correct.
- 4. Purchase textbooks and supplies** by the first day of class. Dates where financial aid is accepted in the Bookstore are published in the Important Dates section of the website.
- 5. Pay tuition and fees** by the first day of the semester.
- 6. Get ready for class:** Check your student email frequently for instructions from your instructor and other important information. Read your class syllabus and contact your instructor if you have any questions about the requirements for your class.

### Dropping/Adding a Class

Students may drop courses through the third day of the semester through BannerWeb. Courses dropped by the third day of the semester are not included on a student's academic history and no tuition and fee charges are incurred. Courses may be added through the third day of the semester.

### Withdrawing from a Class

After the third day of semester, a student may withdraw from a course or the college by submitting the Withdraw from Class(es) form in the Student Portal. Tuition and fees are charged for withdrawn courses and are included on the student's academic history and noted with a "W" as Withdrawn. No refund of tuition and fees are available for withdrawn courses. Please

review the Academic Policies and Procedures section for additional information on how dropping or adding a course or withdrawing from classes can affect your academic progression. Please review the Financial Aid section for additional information on how withdrawing from classes can affect your financial aid.

Withdrawal from any course in a Health Science competitive admission program at any level may affect progression in the chosen program.

Students who are called to active military service may be dropped from a course without penalty (100% refund) by providing a copy of their military orders to the Registrar's Office.

## GRADUATION

Degrees, diplomas, and technical certificates are not issued automatically; it is the student's responsibility to submit an application for graduation in order to be awarded a credential. To be eligible to graduate with a degree, diploma, and/or specified technical certificates of credit from CGTC, a student must satisfactorily complete the program of study in which he/she is enrolled with a grade point average of 2.0; meet all requirements of the program of study; must satisfy the college's residency requirement (see *Residency Requirement*); and must have, with the exception of certain programs\*, completed a high school diploma or GED®.

*\*Certain academic programs may have different graduation requirements; please reference the Academic Programs section for requirements for each program of study.*

### Residency Requirement

To receive a credential from CGTC, students must complete at least 25% of their program of study in residence at CGTC. The following credentials awarded by CGTC must meet minimum residency requirement hours in field in order to be applied to a student's transcript:

- **Associate Degree:** A minimum of 12 semester credit hours must be in the awarded major field of study.
- **Diploma:** A minimum of 9 semester credit hours must be in the awarded major field of study.
- **Technical Certificates of Credit:** Must include at least one course in the awarded major field of study.

Credits earned through the application of prior learning assessment and/or examination cannot be considered in the residency requirement.

### Graduation Checklist

1. Submit a graduation application in the Student Portal (login to the Student Portal, click Forms, then click Apply for Graduation). The application should be submitted when registering for your final semester of classes. If you wish to participate



- in the graduation ceremony, you must submit the application by the end of February.
2. Pay \$35 application fee (degree and diploma graduates only) for each copy of the degree and/or diploma that you would like to receive.
  3. Take the ACT WorkKeys assessment in the Testing Center (degree and diploma graduates only). There is no cost to take this assessment.
  4. Complete the Graduate Exit Survey (the survey will be available online once you submit your graduation application through the Student Portal).
  5. If you received a student loan from CGTC, you must complete exit counseling at [www.studentloans.gov](http://www.studentloans.gov).

After you have submitted the graduation application, your academic record will be evaluated by your faculty advisor and the Registrar for any and all credentials earned to determine if graduation requirements have been met. If your enrollment has not been continuous since initial matriculation and more than one academic term has passed since your last enrollment and matriculation to the college, your record will be evaluated for graduation based on the catalog in effect at the time of readmission.

Graduates will be contacted to obtain feedback on employment outcomes; feedback is collected to ensure that the college matches educational outcomes with the knowledge and skills required by employers.

### Graduation Appeals

A graduation request decision may be appealed in writing to the Vice President for Academic Affairs if extenuating circumstances exist. The 25% residency requirement is a standard for higher education institutions; therefore, no exceptions to the residency requirement shall be granted.

### Graduation Ceremony

CGTC will hold a graduation ceremony for all diploma and degree graduates, and for adult education students that have earned their GED during the academic year, at least once each academic year. Graduation ceremony dates and deadlines are available online at [www.centralgatech.edu/graduation](http://www.centralgatech.edu/graduation).

Graduates are required to wear appropriate academic regalia, which includes a cap, gown, and tassel. Regalia will only be ordered for graduates who indicate that they wish to participate in the graduation ceremony (on the graduation application). There is no charge for regalia.

All graduates will receive a proxy diploma/degree at the graduation ceremony; official credentials will be mailed to the address indicated on the graduation application within eight to ten weeks after the end of each semester. Diplomas will be issued only after all academic and financial obligations have been met.

### Honor Graduate

Any student who has a graduate grade point average of 3.5 or above will be named an Honor Graduate and shall be recognized as such during the graduation ceremony.

[www.centralgatech.edu/graduation](http://www.centralgatech.edu/graduation)

## STUDENT RECORDS

CGTC maintains a student's permanent record and transcript based upon guidelines established by the American Association of Collegiate Registrars and Admission Officers (AACRAO) Academic Record of Transcript Guide. Policies and procedures for release of the official transcript for a student are in accordance with The Family Educational Rights and Privacy Act of 1974 (FERPA). The retention and disposal of student records is in accordance with AACRAO guidelines as stated in the *Retention of Records - A Guide for Retention and Disposal of Student Records*.

A student's official record, maintained for five (5) years, consists of the application for admission, placement scores, appropriate transcripts (high school, technical college, or college), disciplinary record, and financial aid record. Student records are kept in the Office of Admissions; students wishing to examine their file should contact this office. The Registrar is the official custodian of all student records.

### Challenging Accuracy of Records

If, upon inspection and review of his/her record, the student believes that the record is inaccurate, misleading or otherwise in violation of his/her privacy rights, the student has the right to ask that the record be changed or insert a statement in the file. The student should submit the request in writing to the Registrar's Office, who will process the student's request and notify the student of CGTC's decision in writing. Should the request for a change be denied, the student will be notified of the decision and advised of the right to a hearing to challenge the information believed to be inaccurate, misleading, or in violation of the student's privacy rights. The student has 30 days to appeal the decision to the president and ask for a hearing.

On behalf of CGTC's President, a hearing officer shall conduct a hearing at which the student shall be afforded a full and fair opportunity to present evidence relevant to the issues raised in the original request to amend the student's education records. The student may be assisted by one or more individuals, including an attorney. The hearing officer will consider only challenges to the accuracy of the records. Hence, whether or not a grade has been incorrectly recorded on a student's transcript may be considered but not whether the student should have been awarded a grade different from the one given. The hearing officer shall prepare a written decision based solely on the evidence presented at the hearing. The decision will include a summary of the evidence presented and the reasons for the decision. The decision of the hearing officer shall be final, save for any review that may be granted by CGTC's President. If CGTC decides that the challenged information is not inaccurate, misleading, or in violation of the student's right of privacy, it will notify the student of the right to place in the education record a statement commenting on the challenged information and a statement setting forth reasons for disagreeing with the decision. Such a statement shall become a part of the information contained in the education record and will be disclosed with it. A student may make a specific waiver of access to evaluations solicited and/or received under condition

of confidentiality.

### Release of Student Records

Information contained in the student's academic records or on the student's academic transcript is released based upon the Family Education Rights and Privacy Act (FERPA) regulations. CGTC will disclose information from a student's education records only with the written consent of the student, except that the records may be disclosed without consent when the disclosure is to TCSG and CGTC officials who have a legitimate educational interest in the records. Legitimate educational interests include:

- Performing a task that is specified in his or her position description or contract agreement
- Performing a task related to a student's education
- Performing a task related to the discipline of a student
- Providing a service or benefit relating to the student or student's family, such as health care, counseling, job placement, or financial aid
- Maintaining the safety and security of the campus

Students have the right to restrict the release of directory information as outlined by FERPA. Directory information is defined as:

- Full name of student
- Address
- Email address
- Major and field(s) of study
- Degrees and awards and date received
- Dates of attendance
- Participation in official sports and activities
- Height and weight of athletic team members

Additionally, certain state and federal laws require the release of certain student information without prior notification to the student. Issuance of information contained on the transcript or in the student's academic record is the responsibility of the Registrar's Office. [TCSG Procedure 6.3.1p1.] [TCSG Procedure 6.3.1p2.]

## STUDENT RIGHTS

CGTC promotes a climate of academic integrity, rational and critical inquiry, strong work ethic, intellectual freedom, and freedom of individual thought and expression consistent with the rights of others. CGTC protects the rights of its educational mission and objectives. Students have the right to:

1. Be in an atmosphere that is conducive to learning and to attend CGTC educational programs, courses, offerings and activities on campus or any activity sponsored by CGTC off campus in accordance with CGTC policies and procedures.
2. Obtain the necessary knowledge, skills, and abilities in order to obtain initial employment, maintain advanced levels of competence or acquire new levels of competence by participating in programs, courses, offerings, and activities in accordance with CGTC policies and procedures.
3. Develop intellectual, personal and social values.
4. Follow due process procedures.
5. Participate in institutional decision making in

accordance with CGTC policies and procedures.

6. Participate in approved student organizations in accordance with CGTC policies and procedures.
7. Privacy as outlined in the Family Education Rights and Privacy Act (FERPA).

## STUDENT GRIEVANCES

CGTC maintains a grievance process, available to all students, that provides an open and meaningful forum for their grievances, the resolution of these grievances, and is subject to clear guidelines.

### Definitions

- **Business Days:** Weekdays that CGTC's administrative offices are open.
- **Grievant:** the student who is making the complaint.
- **Grievable Issues:** Issues arising from the application of a policy/procedure to the student's specific case is always grievable. Specifically grievable are issues related to student advisement, improper disclosure of grades, intellectual property claims, unfair testing procedures and poor treatment of students; this is a representative list and is not meant to be exhaustive.
- **Non-grievable Issues:** Issues which have a separate process for resolution (i.e. disciplinary sanctions, FERPA, financial aid, academic grades, discrimination, harassment etc.) are not grievable and a student must take advantage of the process in place.
- **Retaliation:** Unfavorable action taken, condition created, or other action taken by a student/employee for the purpose of intimidation directed toward a student because the student initiated a grievance or participated in an investigation of a grievance.

### Informal Grievance Procedure

Students with grievable issues should resolve those issues, if possible, on an informal basis without the filing of a formal grievance.

1. A student has 10 business days from the date of the incident being grieved to resolve the matter informally by approaching their instructor, department chair, or any other staff or faculty member directly involved in the grieved incident.
2. Where this process does not result in a resolution of the grievable issue, the student may proceed to the formal grievance procedure below.

### Formal Grievance Procedure

Where a student cannot resolve their grievance informally, he or she may use this formal grievance procedure.

1. Within 15 business days of the incident being grieved, the student must file a formal grievance in the office of the Vice President for Student Affairs (VPSA) or the technical college president's designee with the following information:
  - a. Name
  - b. Date

- c. Brief description of incident being grieved
  - d. Remedy requested
  - e. Signature
  - f. Informal remedy attempted by student and outcome
2. If the grievance is against the VPSA, the student shall file the grievance with the technical college president.
  3. The VPSA, or CGTC's President's designee, will investigate the matter and supply a written response to the student within 15 business days.
  4. If the grieved incident involves possible unlawful harassment, discrimination or retaliation for reporting unlawful harassment/discrimination, the investigation will be handled pursuant to the Procedure: Unlawful Harassment and Discrimination of Students.
  5. If the grieved incident is closely related to an incident being processed through the harassment/discrimination or disciplinary procedures, the proceedings under the Unlawful Harassment and Discrimination of Student's procedure will take precedence, then the disciplinary procedure and then the student's grievance will be addressed. The grievance will not be processed until after the other procedures have run their course.
  6. The VPSA, or CGTC's President's designee, shall be granted an additional 15 business days to investigate the grievance upon notice to the grieving student.

### Appeal

The student may appeal the decision from the VPSA or CGTC's President's designee to CGTC's President. Only the student has the right to appeal.

1. A student shall file a written appeal to the technical college president within five (5) business days of receiving the response referenced above.
2. The appeal will be decided based entirely on documents provided by the student and the administration, therefore the student must ensure that he or she has provided all relevant documents with his or her appeal.
3. At the sole discretion of CGTC's President, grievance appeals at their institution may be held in one of the following ways:
  - a. CGTC's President may review the information provided by the student and administration and make the final decision; or
  - b. CGTC's President may appoint a cross-functional committee to make the final decision.
  - c. The decision of either CGTC's President or the cross-functional committee shall be made within 10 business days of receipt of the appeal.

4. Whichever process is chosen by CGTC's President, the decision of the grievance appeal is final.

For all timelines established herein, if a student will need additional time, an extension may be granted at the Vice President for Student Affairs' discretion. Retaliation against a student for filing a grievance is strictly prohibited.

## CAMPUS LIFE

The Office of Campus Life hosts student activities throughout the year; students are encouraged to participate in these activities. All student activities comply with Title IX regulations. Students must maintain a minimum 2.00 grade point average to be eligible to participate in student organizations.

### Athletics

CGTC is proud to have an intercollegiate athletics program that features men's and women's basketball and cross country. The Titans are members of the Division I National Junior College Athletic Association (NJCAA) and the Georgia Collegiate Athletic Association (GCAA). CGTC is also home to spirit squads.

[www.cgctitans.com](http://www.cgctitans.com)

### GOAL Program

The Georgia Occupational Award of Leadership (GOAL) is an annual honors program intended to give proper emphasis to the dignity and importance of technical education in today's world. GOAL candidates represent the new image of Georgia's technical colleges, and must recognize technical education's critical impact on Georgia's overall economic health, have a strong work ethic, a dedicated sense of loyalty, and a healthy enthusiasm for promoting technical education in Georgia. Full-time students who have satisfactorily completed one semester are eligible to be nominated by their instructor. One winner is selected to be the CGTC GOAL representative at the consortium level competition. Consortium winners go on to compete at the state level. The winner of the state competition is chosen based on leadership qualities and serves as an ambassador for technical education.

### Student Organizations

#### Association of Information Technology Professionals (AITP)

Association of Information Technology Professionals (AITP) is the leading worldwide society of information technology business professionals and the community of knowledge for the current and next generation of leaders. AITP's mission is to provide its members with the opportunities and resources necessary to develop and advance their IT careers.

#### Future Business Leaders of America-Phi Beta Lambda (FBLA-PBL)

Phi Beta Lambda (PBL), the post-secondary equivalent of Future Business Leaders of America, is the largest student leadership organization in the nation. CGTC is home to the Warner Robins Chapter and the

Macon Chapter. The focus of PBL is on community service, leadership, and personal and professional development. Members participate in club fundraisers and community service projects, and serve as officers and committee members/chairs to develop leadership skills. Additionally, members have the opportunity to compete in regional, state, and national competitions against their peers from other colleges. Students have the opportunity to travel across the state and nation and network with other students and professionals from the business world. Membership is open to all CGTC students; dues are required once per year.

### Health Occupations Students of America

Health Occupations Students of America (HOSA) is an international student organization recognized by the U.S. Department of Education and the Health Science Education (HSE) Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people. HOSA's goal is to encourage all health science instructors and students to join and be actively involved in the HSE-HOSA Partnership.

### National Technical Honor Society

The National Technical Honor Society (NTHS) provides recognition, scholarship opportunities, and career opportunities to students who are enrolled in career and technical education programs.

### Non-Traditional Student Association

The Non-Traditional Student Association (NTSA) provides support and networking opportunities for students who are enrolled in a non-traditional program of study and are seeking to successfully continue their education while managing the demands and responsibilities of adult life. The student may be full-time or part-time.

### SkillsUSA

SkillsUSA is a national membership association serving high school, college and middle school students who are preparing for careers in trade, technical and skilled service occupations, including health occupations, and for further education. SkillsUSA helps develop technical, academic, and employability skills to help students get a job and have a successful career. Students build skills through chapter meetings, contests, leadership conferences, and activities.

### Student Ambassador

Student Ambassadors represent CGTC in college events such as Senior Day, campus tours, graduation, student registration, and career fairs. Ambassadors show leadership and are knowledgeable about CGTC. Any student that is committed to representing CGTC is encouraged to apply. Interested students are required to have a minimum GPA of 2.5 and submit a recommendation letter from a CGTC instructor.

### Student Government Association (SGA)

The Student Government Association (SGA) includes students from all programs of study with officers selected by the student body. The purpose of the organization is to promote better relations between the students and faculty, to enhance the physical

appearance of CGTC, to help promote CGTC and its functions, to plan student activities, to help CGTC in any way possible, and provide input to the Vice President of Student Affairs. SGA meets on a monthly basis and other times as needed.

### Student Veterans Organization

The CGTC chapter of Student Veterans of America (SVA) is designed to help student veterans and their families achieve their educational goals, transition from military to civilian service, access benefits and entitlements, and develop and foster a social network. The SVA is committed to promoting and representing the interests of military-affiliated students and providing outreach services to facilitate the overall wellness of student veterans. The SVA is open to any CGTC active student or graduate who is a US military veteran, reservist, National Guard, or active duty service member.

[www.centralgatech.edu/campuslife](http://www.centralgatech.edu/campuslife)  
[www.centralgatech.edu/events-calendar](http://www.centralgatech.edu/events-calendar)

### Wellness Center

CGTC offers a wellness center on the Macon and Warner Robins campuses. The centers are open to all CGTC students, faculty, and staff, and feature a wide range of equipment including treadmills, stationary bikes, and elliptical machines. Free weights, bench presses, lifting platforms, a universal machine, jump ropes, pull up bars, foam rollers, stability balls, plyometric boxes, and exercise mats are also available. Locations and hours of operations are posted online.

[www.cgctitans.com/information/facilities](http://www.cgctitans.com/information/facilities)

## PUBLIC SAFETY

CGTC's Department of Public Safety is committed to providing the highest level of security and safety for students, faculty, and staff. Students are expected to follow departmental safety regulations at all times and are not to use any equipment except under the supervision of the instructor. Students are not permitted in classrooms or labs if supervision is not available. All students shall assist in maintaining safe working conditions by notifying the instructor of any dangerous condition, faulty equipment or tools, or any unsafe practices being conducted. Violation of safety regulations may result in immediate disciplinary action.

### Campus Carry

House Bill 280 (2017-2018 Regular Session), also known as Georgia's "campus carry law," was signed into law with an effective date of July 1, 2017. This bill legalizes the concealed carry of handguns (revolvers and pistols) in some areas of public college and university campuses. For the purposes of the "campus carry law," concealed is defined as a handgun carried in such a way that it does not actively solicit the attention of others, is not openly and intentionally displayed, and is substantially covered by an article of clothing or carried within a bag of nondescript nature.

Concealed handguns may be carried in any building and on land owned or leased by CGTC, unless specifically prohibited. Prohibited areas where

concealed handguns may NOT be carried include:

- Any buildings or property when in use for athletic sporting events
- Student housing
- Preschool or childcare spaces
- College and career academies
- Classes with high school students
- Faculty, staff, or administrative offices
- Rooms where disciplinary hearings are conducted

The concealed carrier must be 21 years of age or older, unless an active member of the United States Armed Forces, and have a valid Georgia Weapons Carry License (or a weapons carry license/permit from a reciprocal state if the carrier is not a resident of Georgia). The carry license holder is responsible for knowing and following the law at all times. Guides for students and employees are available on the Public Safety webpage.

### Emergency Preparedness

An *Emergency Preparedness Guide for Emergency Response* is posted throughout all College locations. This guide serves as a quick reference for how to respond in the case of an emergency on campus.

### Accidents and Medical Emergencies

First aid kits, safety equipment, and staff trained in first aid are available at campuses and centers. All accidents, no matter how minor an accident appears, must be reported to an instructor or Public Safety personnel. Professional emergency care, if needed, will be secured by an administrator. In case of serious accident or illness, the College will refer the student to the nearest hospital or the hospital of student's choice for emergency care; the College will notify the person specified by the student as an emergency contact. The student or his/her family will be responsible for the cost of the emergency care, including ambulance services.

To ensure the safety of CGTC employees and students, CGTC has implemented an *Exposure Control Plan*, which addresses occupational exposure to blood and airborne pathogens. The plan includes prevention, protection, training, documentation, and follow-up of critical incidents as applied to occupational areas of study. Students must comply with all prescribed procedures and safety measures as outlined within individual program requirements.

### Bomb Threat

If a bomb threat is received, members of the administrative staff will notify each classroom of the need to evacuate using the posted evacuation procedure. When the building has been declared safe, Public Safety personnel will let students and employees know that they may return to the building. The fact that it is safe to return to the building will also be transmitted over the College's emergency notification system. During an evacuation process, do not use any electronic communication devices until directed to do so by on-site officials.

### Evacuation

During an emergency situation, it may become necessary to evacuate people from the main campus

area to a location away from the college. Emergency staging areas will be designated by Public Safety officials and this information will be announced at the time the order to evacuate is given.

### Fire and Smoke

The fire alarm and strobe lights will be activated in case of fire or fire drill. Students and employees should evacuate the building according to evacuation procedures posted in each area and wait at the designated place until given the signal to return to the building. Both the need to evacuate the building and the fact that it is safe to return will also be transmitted over the College's emergency notification system. DO NOT use elevators during a fire emergency.

### Lock-Down

The college may need to initiate a lock-down procedure to manage serious situations such as trespass violation with a threat, domestic violence, active shooter, other violent individual, hostage situation, or other barricaded individual. If a lock-down order is given, remain calm and:

- Remain in the classroom away from all windows and doors; faculty will close and lock their doors. Students in the hallways should go to the nearest classroom.
- Close the blinds and turn off all the lights.
- Do not use your cell phone; keep the lines clear for emergency responders.

Faculty will wait for a signal from Public Safety personnel or other first responders before releasing students.

### Tornado and Severe Weather

The Department of Public Safety will monitor conditions during a severe weather WATCH; students and employees should continue normal activities. During a severe weather WARNING, one announcement will be made using College's emergency notification system of when to take cover. Tornado evacuation routes to shelters are posted in each area. Another announcement will be made when it is safe to resume activities. In case of power failure, a member of the administrative staff will notify employees of proper procedures to ensure the safety of students.

### Parking and Traffic Regulations

Students are required to abide by the speed limit posted on campus and display a parking permit on their rear view mirror. One permit is issued without charge from the Business Office; additional permits are \$5.00 each. Cars must be parked uniformly facing each other to allow security personnel to readily view parking permits. Students are to park in designated student parking zones at all times; parking along the thoroughfares or in the rear of buildings is prohibited. Live work projects being performed on vehicles parked in areas other than student parking must have a work order form displayed in the front windshield of the vehicle or the vehicle will be ticketed. Handicapped parking areas are designated with a wheelchair icon; students must have an approved handicapped license plate or permit to park in handicapped spaces.

Security personnel are authorized to ticket vehicles

and/or to have them removed/towed at the owner's expense. A fine will be imposed for traffic violation citations; fines must be paid to the Business Office within three days of the violation. Students who do not pay fines within three days, or who receive three traffic violations during any one academic year, may be subject to disciplinary action. The College will not certify attendance, enrollment, or grades until the fine is paid.

### Annual Security Report

CGTC honors the Campus Security Act, which requires colleges to report crime statistics and other public safety measures, procedures, and policies to the College community. Crime statistics are reported to the U.S. Secretary of Education per the electronic reporting procedure established by the Secretary. CGTC's Annual Security Report includes a description of enforcement and notification procedures, as well as crime prevention and education programs, including the Haven sexual assault prevention program. The Annual Security Report is available online at [www.centralgatech.edu/public-safety](http://www.centralgatech.edu/public-safety).

### Registered Sex Offenders

In accordance with O.C.G.A. § 42-1-12, the Georgia Bureau of Investigation (GBI) is the central repository for Georgia's Violent Sexual Offender Registry. Students may obtain information concerning registered sex offenders through local law enforcement or the Georgia Bureau of Investigation at <http://gbi.georgia.gov/georgia-sex-offender-registry>.

### School Closing

If it is necessary for the College to be closed due to inclement weather or other emergencies, notification will be made to students and employee via official CGTC email, the CGTC website, and official CGTC social media accounts (e.g. Facebook and Twitter, at [www.facebook.com/centralgatech](https://www.facebook.com/centralgatech) and [www.twitter.com/cgtc](https://www.twitter.com/cgtc) respectively). Notification may also be sent using the College's emergency notification system. A closure required during the class day will be communicated by instructors and the College's emergency notification system.

[www.centralgatech.edu/public-safety](http://www.centralgatech.edu/public-safety)

## STUDENT RESOURCES

### Academic Success Center

The Academic Success Center (ASC) offers tutoring, workshops, and computer assistance at no cost to CGTC students. Professional and peer tutors are available to help with math, English, business, MSOffice, and more. Online tutoring is available 24/7 through *Smarthinking*. The ASC also offers workshops to help students improve study and test taking skills, improve reading comprehension and retention, take better notes, manage text anxiety, and more.

[www.centralgatech.edu/success](http://www.centralgatech.edu/success)

## Advisement

Advisement includes helping students interpret degree requirements, monitoring academic progress, and preparing course schedules. The role of the academic advisor is to assist students in making sound decisions regarding their program of study and their career goals. The academic advisor may offer opinions and suggestions relevant to program of study, but the student must accept responsibility for final decisions. In addition, the advisor may recommend or refer the student to other offices or agencies for personal, financial, or other type of counseling services to answer questions or solve problems related to academic or career matters.

New students will initially see an advisor in the CARE Center to plan a class schedule for the semester. Student advisement of currently-enrolled students is the responsibility of the full-time faculty. Faculty members are assigned as advisors to specific students according to their selected field of study. It is the responsibility of the student to schedule an advisement session with their faculty advisor prior to registering each semester.

Although students may take courses at any campus, advisement should be done with the assigned program major advisor. It is the student's responsibility to be aware of courses required for graduation/completion of the chosen major, to meet all graduation/completion requirements, and to complete the registration process each term.

[www.centralgatech.edu/academic-advisement](http://www.centralgatech.edu/academic-advisement)

## Bookstore

Students may purchase required books, tools, uniforms and other equipment/supplies appropriate to their program of study in the CGTC Bookstore. CGTC apparel and gifts are also available for purchase. The Bookstore is located on the Warner Robins, Macon, and Milledgeville campuses, and online purchasing is also available. Hours are posted online.

[www.centralgatech.edu/bookstore](http://www.centralgatech.edu/bookstore)

## Career Services

The Career Services Office offers a variety of programs designed to assist students and alumni in developing and managing effective career planning. Services include career counseling, resume preparation and review, workshops, guidance in choosing the right program of study, career fairs, and a variety of job search services. Career Services staff offer individual coaching, as well as presentations and workshops on topics such as career exploration, resume development, cover letter writing, and interviewing skills.

[www.centralgatech.edu/career](http://www.centralgatech.edu/career)

## CGTC Foundation

The CGTC Foundation offers a wide range of scholarships to students. Scholarship funds can be used for tuition and fees (after all other financial aid

has been awarded and applied to student's account). In the event that a student has enough financial aid to cover tuition and fees, scholarship funds may be approved to purchase education-related expenses such as program supplies. Textbook scholarships may be used in the CGTC Bookstore for required textbooks for the student's program of study.

[www.centralgatech.edu/foundation](http://www.centralgatech.edu/foundation)

## Counseling Services

The **Counseling Resource Center** provides assistance and guidance in resolving personal, social, or psychological problems and difficulties through counseling, so that students are better able to achieve their academic goals and reach their full potential. The Center offers confidential assistance with issues such as anxiety, stress, emotional problems, relationships, and alcohol/substance abuse. Additional services may include coping skills, crisis management, anger management, support groups, and community referrals. Services are provided by a non-judgmental, objective, licensed professional who is trained to help with reflection, support, and solutions. Students may have up to four solution-focused brief therapy counseling sessions.

[www.centralgatech.edu/counseling](http://www.centralgatech.edu/counseling)

## Food Services/Titans Cafe

Vending machines and student lounges are located in various locations. Additionally, the Titans Cafe, located on the Warner Robins and Macon campuses, offers a variety of hot menus, prepared sandwiches, breakfast, and more.

## Instructor Assistance

All instructors have designated hours for providing assistance to students, academic advisement, counseling, and other appropriate services. Students seeking access to faculty should consult their course syllabi for available office hours or check the hours posted on office and/or classroom doors.

## Library

The CGTC Library provides access to extensive online learning resources, journal articles, books, videos, and research assistance to students on and off campus. Library facilities are equipped with computers and WiFi for student use. Printing, scanning, and copying services are available. Currently enrolled CGTC students may borrow and use library resources at Fort Valley State University, Georgia College and State University, Middle Georgia State University, and any of Georgia's technical colleges.

[www.centralgatech.edu/library](http://www.centralgatech.edu/library)

## Live Work

Live work projects are approved for providing realistic training for students; college personnel and students may have personal property repaired in those programs

and departments conducting live work. All live work must be approved by the instructor in the program or department where the live work is to be done. Appropriate paperwork must be completed and billing for all live work services will be based on the service rendered. Seeking or performing live work must not interfere with the instructional program. All live work is done by students for the purpose of learning and no guarantee, either actual or implied, is furnished on live work. CGTC is not responsible for loss or damage to property.

[www.centralgatech.edu/community](http://www.centralgatech.edu/community)

## Military and Veterans Services

CGTC is proud to welcome members of the military and veterans. We honor your service and value the experiences and perspectives you bring to the classroom. Our goal is to assist adult learners, especially military and veteran students, to successfully earn a degree, diploma, or certification. We are committed to offering you our best in academic advising, transitional guidance, and opportunities to connect with other military and veteran students.

### Georgia VECTR Center

The Georgia Veterans Education Career Transition Resource (VECTR) Center is a one-stop-shop for veterans and their family members seeking educational and employment assistance, accelerated training opportunities, and connection to vital state and community resources required to transition from military service and successfully enter the civilian workforce. The Georgia VECTR Center serves as a gateway for veterans' entry into Georgia's public postsecondary educational systems and is solely funded by the state as a not-for-profit organization designed to serve Active Duty, Reserve, Guard, Veterans and their families. The VECTR Center provides unique, accelerated programs in high demand and strategic industries tailored to abbreviate the process of receiving post-secondary certificates. Through on-site partners such as the Georgia Department of Veterans Service, Georgia Department of Labor, Georgia WorkSource, Department of Veterans Affairs, and United Way/Mission United, the VECTR Center provides centralized access to veterans seeking benefits, educational opportunities, employment services, educational funding, testing, and links to community resources.

[www.centralgatech.edu/military](http://www.centralgatech.edu/military)  
[www.gavectr.org](http://www.gavectr.org)

## Orientation

CGTC provides an orientation program to fully inform new and returning students on all areas of the College. Orientation introduces students to facilities, rules and policies, work ethics, programs of study, and student activities. All students are responsible for information presented at orientation sessions.

[www.centralgatech.edu/orientation](http://www.centralgatech.edu/orientation)

## Prior Learning Assessment

Prior Learning Assessment (PLA) is a pathway for

assessing learning gained outside of a traditional academic environment; this could be learning acquired through prior employment, volunteer, military, corporate training, non-credit courses, or other relevant experience. Through PLA, your prior experience is evaluated to determine if it translates to college-level knowledge and how that knowledge might equate to college credit. PLA can save you time and money because you may not be required to take classes for material that you have already mastered. Complete information on PLA procedures is available in the online *Prior Learning Assessment (PLA) Student Handbook*.

[www.centralgatech.edu/PLA](http://www.centralgatech.edu/PLA)

## Special Populations

The mission of the Special Populations Office is to provide student-centered comprehensive programs, services, and events that promote equity, enhance the educational experience, foster success, and contribute to the economic self-sufficiency of students who are members of special populations. Services are available to students who are economically disadvantaged, special needs populations, single parents, displaced homemakers, dislocated workers, and those enrolled in non-traditional careers. Services are also available for students with limited English proficiency.

Available services include assistance with book purchases through the Lending Library (based on availability of funds), assistance with classroom accommodations, career guidance and assessments, student resource guides and referral information, identification of resources to meet student needs, and language translation services.

### Disability Services

The Special Populations Office coordinates services for students with disabilities in order to assist these students in realizing and maximizing their academic and personal goals. These support services ensure admissions, services, activities, facilities, and academic programs are accessible to and usable by students defined as disabled under the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973.

In order to receive accommodations, students must self-disclose, request accommodations, and provide current documentation that verifies the disability, clarifies how the disability will impact the student in an academic setting, and states the accommodations recommended as appropriate. Based on the student's documentation and a personal interview, reasonable accommodations may be provided. The documentation should be prepared by a professional and dated within the last three years.

Accommodations may include testing, alternative textbook formats, assistive technology, and special classroom seating. Services not provided include personal devices such as hearing aids or glasses; personal services such as assistance with eating, toileting, or dressing; accommodations that excessively lower or change classroom or program standards; and accommodations that would change the essence or compromise the academic integrity of a program.

To request accommodations, students must contact the Office of Special Populations to schedule an appointment and begin the evaluation process:

#### Donna Dutcher

(Crawford, Dooly, Houston, Peach, Pulaski, and Twiggs Counties)

(478) 218-3229

[ddutcher@centralgatech.edu](mailto:ddutcher@centralgatech.edu)

#### Kashatriya Eason

(Bibb, Baldwin, Jones, Putnam, and Monroe Counties)

(478) 476-5137

[keason@centralgatech.edu](mailto:keason@centralgatech.edu)

[www.centralgatech.edu/specialpops](http://www.centralgatech.edu/specialpops)

## T.E.A.M.S./Early Intervention

Students who feel overwhelmed, are behind in classes, or need help getting back on track may request one-on-one assistance from T.E.A.M.S., TCSG's Early Alert Management System. CGTC's Student Navigator can connect students with T.E.A.M.S. services to help locate community and college resources, overcome barriers, find answers to questions, connect with college faculty and staff, and navigate college issues towards a positive resolution.

[www.centralgatech.edu/studentresources](http://www.centralgatech.edu/studentresources)

## TECHNOLOGY

Students must comply with CGTC's Acceptable Computer and Internet Use policy when using any CGTC computer or technology resource. Complete information on how to use all technology resources is available online.

[www.centralgatech.edu/studenttech](http://www.centralgatech.edu/studenttech)

### BannerWeb

BannerWeb is used to check the status of financial aid, sign up for classes, drop classes, check final grades, update mailing addresses and phone numbers, and more.

### Blackboard

Information about Blackboard and online class accounts is available online at [www.centralgatech.edu/online-classes](http://www.centralgatech.edu/online-classes). For help with Blackboard, contact your instructor first. Class information will not be available in Blackboard until the semester has started.

### CGTC Mobile App

Access the Student Portal and BannerWeb, sign up for classes, view your student account balance and make a payment, view your schedule, see important notifications, access campus maps and contact information, and more.

### Degree Works

See a list of classes that you must take for your major, check your progress towards graduation, read notes



from your advisor, email your advisor, view academic standing and GPA, and more. Your advisor can also arrange the classes that you need into future semester blocks so that you can plan your schedule and graduate on time. To view your plan (when available), click the Plans tab.

### **J Drive/OneDrive**

Students may save their classwork, important documents, and other education-related files to their J Drive and/or OneDrive. The J Drive (and files saved to the J Drive) can be accessed from computers in a classroom, computer lab, the Library, and the Academic Success Center. OneDrive (and files saved to OneDrive) can be accessed at any time from any computer (either at CGTC or off-campus) with internet connectivity. Students are provided 500 MB of storage space; once the storage space has been used, students must delete files from the J Drive and/or OneDrive before additional files may be saved. Files stored on these CGTC-provided resources must adhere to CGTC's Acceptable Computer and Internet Use policy. Files that do not adhere to this policy, including personal files such as photos, songs, videos, illegal content, and anything that is not CGTC-related, may be deleted without notice.

### **Office 365/Office 2016**

CGTC students have free access to several Microsoft products including Word, Excel, PowerPoint, and Outlook.

### **Student Email**

Email is the official form of communication for CGTC. It is critical that students check their student email frequently to stay up to date on student activities, important dates and deadlines, career fairs, and more.

### **Student Portal**

Use the Student Portal to view your class schedule, email your instructor and advisor, access important forms and class files, apply for graduation, and more.

### **Using Computers on Campus**

Computers are available for students to use in the Library, Academic Success Center, and computer labs.



# Student Conduct and Discipline

## DRUG FREE SCHOOLS

In accordance with the federal Drug Free Schools and Communities Act, CGTC makes every effort to ensure that effective drug and alcohol abuse prevention information is made available to students and employees. CGTC's Office of Public Safety is responsible for the investigation of complaints of drug possession on campus. CGTC reserves the right to conduct random drug checks and use drug detection dogs to help with the enforcement of this policy. Checks involving drug detection dogs will be performed by handlers and canines trained and certified in the detection of illegal drugs/narcotics. Canines will be allowed to make sweeps through all common areas, parking lots, and will be utilized inside of the buildings when it is deemed necessary. Searches will be conducted of vehicles, rooms, and other areas once the canine alerts which will provide probable cause to believe that drugs are present in that area.

If a student is found to be in possession of drugs, the student will immediately be referred to the Vice President of Student Affairs or the Executive Director of Conduct, Appeals and Compliance for disciplinary measures. Criminal charges may also be brought to anyone who is found in possession of illicit drugs.

### Policy

No student may engage in the unlawful manufacture, possession, use or distribution of illicit drugs and alcohol on the technical college's property or as part of any of its sponsored activities. Such unlawful activity may be considered sufficient grounds for serious punitive action, including expulsion. 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 quarter and forfeit all academic credit for that period.

This policy has been developed in concert with the federal Drug Free Schools and Communities Act which was enacted to ensure that any institution of higher education that receives funds under any federal program has adopted and implemented a program to prevent the use of illicit drugs and abuse of alcohol by students. It also incorporates the statutory mandates required under the state Drug-Free Postsecondary Education Act of 1990 (O.C.G.A. § 20-1-20 et seq.).

CGTC 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, CGTC shall, with respect to any student so convicted:

1. Take additional appropriate action against such student up to and including expulsion as deemed necessary.
2. Provide such student with a description of any drug or alcohol counseling treatment, or rehabilitation

or re-entry programs that are available for such purposes by a federal, state or local health, law enforcement or other appropriate agency.

[TCSG Policy: 6.7.1.]

### Dangers of Drug and Alcohol Use

According to the National Institute on Drug Abuse, drug use can have a wide range of effects depending on the specific drug, frequency of use, and other factors. Short-term effects, which may occur after only one use, include changes in appetite, heart rate, blood pressure, and mood, as well as heart attack, stroke, overdose, and death. Long-term effects include heart or lung disease, cancer, and mental illness. Indirect effects of drug and alcohol use include changes to sleep, decision-making, and contraction of diseases such as hepatitis and HIV/AIDS. Drug use can affect babies born to women who use drugs while pregnant.

### Counseling Resources

CGTC's Counseling Resource Center offers confidential assistance with alcohol/substance abuse. For more information, or to schedule an appointment, visit [www.centralgatech.edu/counseling](http://www.centralgatech.edu/counseling).

## ACCEPTABLE COMPUTER AND INTERNET USE

The purpose of CGTC-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 CGTC. Students utilizing CGTC-provided internet access are responsible for good behavior on-line just as they are in a classroom or other area of the college. Access is a privilege, not a right. Access entails responsibility.

Users should not expect files stored on CGTC-based computers to be private. Electronic messages and files stored on CGTC-based computers shall be treated like other CGTC premises that are 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, CGTC officials shall cooperate with law enforcement officials who are properly authorized to conduct a search of computers and computer systems.

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

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 one (1) year of imprisonment, plus civil liability.

### Unacceptable Use

The following uses of CGTC-provided computers, networks, and internet access are not permitted:

1. Creating, accessing, or transmitting sexually explicit, obscene, or pornographic material.
2. Creating, accessing, or transmitting material that could be considered discriminatory, offensive, threatening, harassing, intimidating, or attempts to libel or otherwise defame any person.
3. Using computer technology to 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.
4. Violating any local, state, or federal statute.
5. Vandalizing, damaging, disconnecting, or disabling the property, including equipment, software, or data, of another individual or organization.
6. Accessing another individual's password, materials, information, or files without permission.
7. Violating the copyright or otherwise using the intellectual property of another individual or organization in violation of the law, including software piracy and unauthorized peer-to-peer file sharing;
8. Conducting private or personal for-profit activities, including use for private purposes such as business transactions, private advertising of products or services, and any activity meant to foster personal gain.
9. Knowingly endangering the security of any CGTC computer or network.
10. Willfully interfering with another's authorized computer usage.
11. Connecting any computer or electronic device to any of the CGTC networks unless it meets technical and security standards set by CGTC.
12. Creating, installing, or knowingly distributing a

computer virus, rootkit, keystroke logger, "Trojan horse," or other surreptitiously destructive program on any CGTC computer or network facility, regardless of whether any demonstrable harm results.

13. Modifying or reconfiguring the software or hardware, including download and/or installation of new software, of any CGTC computer or network without proper authorization.
14. Conducting unauthorized not-for-profit business activities.
15. Conducting any activity or solicitation for political or religious causes.
16. Performing any activity that could cause the loss, corruption of, prevention of rightful access to, or unauthorized distribution of CGTC's data and information.
17. Creating, accessing, or participating in online gambling (occasional access to information or websites of the Georgia Lottery Corporation shall not constitute nor be considered inappropriate use).
18. Capturing and/or recording network traffic without authorization.
19. Using electronic devices such as cell phones, beepers, walkie talkies, cameras, gaming devices, and any other that may cause unnecessary disruption to the teaching/learning process, in classrooms, labs, and other instructional, event, or affiliated facilities on CGTC premises, unless otherwise permitted by CGTC officials.

To meet the requirements of the Higher Education Opportunity Act, CGTC provides the following link as a legal alternative for downloading or acquiring copyrighted materials:

[www.educause.edu/legalcontent](http://www.educause.edu/legalcontent).

Occasional personal use of internet connectivity and e-mail that do not involve any unacceptable use as described above may occur. Any such use should be brief, infrequent, and shall not interfere with the student's performance, duties, and responsibilities.

Users of CGTC's computers and computer systems are subject to the Technical College System of Georgia's policy on the development of Intellectual Property. Any violation of this policy and rules may result in disciplinary action against the employee or student. When and where applicable, law enforcement agencies may be involved. **[TCSG Policy: 3.2.1.] [TCSG Procedure: 3.2.2p.]**

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

access to the internet.

## STUDENT CODE OF CONDUCT

Any student found to have committed any of the following types of misconduct is subject to the disciplinary sanctions outlined in the Student Discipline section of the catalog.

### Definitions

- **CGTC Official:** any person employed by CGTC performing assigned responsibilities on a part-time, full-time, or adjunct basis.
- **Faculty Member:** any person hired by CGTC to conduct teaching, service, or research activities.
- **Hearing Body:** as defined in the Student Disciplinary Procedure.
- **Member of the CGTC community:** any person who is a student, faculty member, contractor, CGTC official, or any other person/s involved with CGTC, involved in the community, or employed by CGTC.
- **Policy:** the written regulations of CGTC as found in, but not limited to, the Student Code of Conduct, Catalog, the CGTC Policy Manual, and the Policy Manual approved by the State Board for the Technical College System of Georgia.
- **Premises:** all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by CGTC (including adjacent streets and sidewalks).
- **Student:** all persons taking courses at CGTC, including full-time, part-time, dual enrollment, joint enrollment, non-credit, and credit. Persons who are not officially enrolled for a particular term but who have a continuing relationship with CGTC are also considered "students."

### Academic Misconduct

Academic misconduct includes, but is not limited to, the following definitions:

1. **Aiding and Abetting Academic Misconduct:** Knowingly helping, procuring, encouraging or otherwise assisting another person to engage in academic misconduct.
2. **Cheating:**
  - a. 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 smart phones, or other electronic devices.
  - b. 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.

- c. 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.
- d. 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.
- e. 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.
- f. Taking an examination or any other written or oral work submitted for evaluation and/or a grade in place of another person.
- g. Obtaining unauthorized access to the computer files of another person or agency and/or altering or destroying those files.
- h. Obtaining teacher edition text books, 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:

- a. 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.
- b. 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.
- c. Submitting as one's own original work material that has been produced through unacknowledged collaboration with others without release in writing from collaborators.

### Non-Academic Misconduct

Includes, but is not limited to the following:

#### 1. Behavior

- a. **Indecent Conduct:** Lewd or indecent conduct, or distribution of obscene or libelous written or electronic material.
- b. **Violence:** Physical abuse of any person (including dating violence, domestic violence or sexual violence) on CGTC premises or at CGTC-sponsored or 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.

- c. Harassment:** CGTC 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. CGTC also prohibits stalking, or other behavior which 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.
- d. Disruption:** Prohibits activities not otherwise protected by law including the First Amendment to the Constitution of the United States of America, which intentionally obstructs or interrupts teaching, research, administration, disciplinary proceedings or other college activities, including public service functions and other duly authorized activities on CGTC premises or at CGTC-sponsored activity sites.
- e. Failure to Comply:** Failure to comply with lawful directions of CGTC officials and/or failure to identify oneself to these persons when requested to do so.

## 2. Professionalism and Personal Appearance:

CGTC conducts educational programs to prepare students for employment; therefore, all students are expected to dress appropriately according to the occupations for which they are being trained. Students who are deemed inappropriately dressed in a manner which could present a safety hazard or which might be offensive to others or cause disruption to the College will not be allowed to attend class. Shirts, caps or any other article of clothing that implies obscenities or gang affiliation or that can be construed as offensive or discriminatory are prohibited, as this could symbolize disruptive behavior. All pants must be worn at the waist. Students found in violation are subject to being removed from any further college participation and may be subject to disciplinary action. Students should observe, at all times, generally accepted hygiene practices, neatness of appearance, good grooming, and safety. Some programs of study have a more restrictive dress policy that governs students attending class, clinical, and co-ops.

## 3. Use of Technical College Property

- a. Theft and Damage:** Prohibits theft of, misuse of, or harm to CGTC property, or theft of or damage to property of a member of the CGTC community or a visitor on CGTC premises or at a CGTC function.
- b. Occupation or Seizure:** Illegal occupation or seizure in any manner of CGTC property, CGTC premises, or any portion thereof for a use inconsistent with prescribed, customary, or authorized use.
- c. Presence on CGTC premises:** Prohibits unauthorized entry upon CGTC premises; unauthorized entry into CGTC premises or a portion thereof which has been restricted in use; unauthorized presence in CGTC premises after closing hours; or furnishing false information to gain entry upon CGTC premises.
- d. 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 CGTC 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 CGTC.
- e. Fire Alarms:** Prohibits setting off a fire alarm or using or tampering with any fire safety equipment on CGTC premises or at CGTC-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 CGTC official.
- f. Obstruction:** Prohibits obstruction of the free flow of pedestrian or vehicular traffic on CGTC premises or at CGTC-sponsored or supervised functions.

## 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).

- a. Alcohol:** Students must comply with all state and federal laws regulating alcohol as well as TCSG Policy II.C.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 CGTC premises or at CGTC-sponsored or supervised functions (including off-campus functions), internships, externships, practicum, clinical sites, co-operative or academic sponsored programs or activities, or in a CGTC-owned vehicle is prohibited.
- b. Controlled substances, illegal drugs and drug paraphernalia:** CGTC 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.

- c. **Food:** CGTC prohibits eating and/or drinking in classrooms, shops, and labs or other unauthorized areas on CGTC premises, unless otherwise permitted by CGTC officials.
  - d. **Smoking/Tobacco:** CGTC 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 CGTC premises.
5. **Use of Technology:** *See Student Conduct, Acceptable Computer and Internet Use*
  6. **Weapons:** CGTC 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, and O.C.G.A. § 43-38-10.
  7. **Gambling:** CGTC prohibits the violation of federal, state or local gambling laws on CGTC premises or at CGTC-sponsored or supervised activities.
  8. **Parking:** *See Student Progress and Resources, Public Safety, Parking and Traffic Regulations*
  9. **Financial Irresponsibility:** CGTC prohibits the theft or misappropriation of CGTC-owned property, student organization, or other assets. CGTC prohibits failure to meet any and all financial obligations to the College. All tuition and fees should be paid prior to the first day of the semester.
  10. **Violation of CGTC Policy:** Violation of CGTC 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, or student organizations.
  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 CGTC, either to CGTC or to others in the community, including, but not limited to, falsification of: CGTC transcripts; transcripts or other documentation from other institutions to obtain credit from or admission to CGTC; CGTC report cards or other grade reports; documentation related to a student's citizenship status; tests, homework, attendance records; signature of any CGTC 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 CGTC or records related to any clinical, internship or other academic activity associated with CGTC.

### 13. Violation of Law:

- a. 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 CGTC's vital interests and stated mission and purpose.
- b. 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.
- c. When a student is charged by federal, state, or local authorities with a violation of law, CGTC will not request or agree to special consideration for that individual because of his/her status as a student. CGTC 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:

- a. Failure to obey the notification of the Vice President for Student Affairs or the designee of CGTC's President, Hearing Body, Appellate Board, or CGTC official.
- b. Falsification, distortion, or misrepresentation of information in a judicial proceeding.
- c. Disruption or interference with the orderly conduct of a disciplinary proceeding.
- d. Initiating a disciplinary proceeding knowingly without cause.
- e. Attempting to discourage an individual's proper participation in or use of the disciplinary process.



- f. 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.
- g. 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.
- h. Failure to comply with the sanction(s) imposed under the Student Code of Conduct.

**15. Visitors:** Loitering will not be tolerated. Anyone who is not a current student and who has not checked in with appropriate personnel will be asked to leave the campus. Repeated violations can lead to the person being banned from campus as well as possible arrest and prosecution.

**16. Children:** Students are expected to make child care provisions for their children. Children are not allowed on campus other than in the child care center. Students are not to bring children to class or leave children on campus while the student is in class. Children will not be left unattended in automobiles, hallways, vending areas, or outside buildings. Children are not allowed to use the Cosmetology Department.

**17. Photo Identification:** All students are required to have their student ID with them at all times while on campus or while attending a CGTC-sponsored event. Students must provide the ID when requested by appropriate school personnel (any faculty member, administrative personnel, and public safety personnel).

**18. Student Athlete:** A student who also engages in an organized competitive sport sponsored by CGTC. In addition to the regular rules and regulations that apply to all CGTC students, student athletes are also bound by the policies and procedures prescribed in the CGTC Athletic Handbook.

## UNLAWFUL HARASSMENT AND DISCRIMINATION

All students at CGTC shall be provided an environment free of unlawful harassment (including sexual harassment and sexual violence), discrimination, and retaliation. All students and employees are expressly prohibited from engaging in any form of unlawful harassing, discriminating, intimidating, or retaliatory behavior or 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 for such prohibited conduct if other corrective measures are ineffective. Allegations of prohibited conduct occurring at clinical sites to which students are assigned shall be investigated in accordance with TCSG

Procedure 6.1.2p. Sexual Harassment and Misconduct.

### Definitions of Unlawful Harassment

#### Harassment Other Than Sexual Harassment

Unlawful 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, genetic information or disability and which:

1. Has the purpose or effect of creating an objectively and unreasonably intimidating, hostile or offensive educational environment, or
2. Has the purpose or effect of objectively and unreasonably interfering with an individual's educational performance.

Unlawful harassing conduct or behavior can include, but is not limited to, epithets, slurs, negative stereotyping, or threatening, intimidating or hostile acts that relate to race, color, religion, gender, national origin, genetic information, age or disability. Unlawful harassing conduct can include jokes or pranks that are hostile or demeaning with regard to race, color, religion, gender, national origin, age or disability. Unlawful harassing conduct may also include written or graphic material that disparages or shows hostility or aversion toward an individual or group because of race, color, religion, gender, national origin, age, or disability, and that is displayed on walls, bulletin boards, computers, or other locations, or otherwise circulated in college community in any format.

Conduct which threatens, coerces, harasses or intimidates another person or identifiable group of persons, in a manner that is considered unlawful under state and federal laws pertaining to stalking or dating/domestic violence while on CGTC premises or at CGTC-sponsored activities may also be considered unlawful harassment.

#### Sexual Harassment

Unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal, written, electronic or physical conduct of a sexual nature when:

1. Submission to such conduct is made, either explicitly or implicitly, a term or condition of an individual's education;
2. Submission to, or rejection of, such conduct by an individual is used as the basis for education decisions affecting such individual; or,
3. Such conduct has the purpose or effect of unreasonably interfering with an individual's academic performance or creating an intimidating, hostile or offensive educational environment.

Sexually harassing conduct or behavior (regardless of the gender of the persons involved) can include but is not limited to: physical touching, sexual comments of a provocative or suggestive nature, suggestive looks or gestures, sexually explicit jokes, electronic media/communication, printed material or innuendos intended for and directed to another, requests for sexual favors, making acceptance of any unwelcome

sexual conduct or advances a condition for grades, continued enrollment or receipt of any educational benefit or determination.

### Sexual Violence

Physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent, including but not limited to sexual assault, rape, sexual battery, and sexual coercion. All acts of sexual violence are considered unlawful sexual harassment, regardless of gender, for purposes of this procedure.

Any individual 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 students are encouraged to report events of unlawful harassment, discrimination, sexual violence and/or retaliation ("prohibited conduct") against themselves or others to the Title IX/Section 504/ADA Coordinator for CGTC nondiscrimination policies:

#### Cathy Johnson

*Executive Director of Conduct, Appeals & Compliance*  
Warner Robins Campus, Room A-136  
Phone: (478) 218-3309  
Fax: (478) 471-5197  
Email: cajohnson@centralgatech.edu

Reports will be treated in an expeditious and confidential manner.

CGTC will not tolerate unlawful retaliation for having filed a good faith harassment and/or discrimination complaint or for having provided any information in an investigation. Unlawful retaliation is defined as unfavorable action taken, unfavorable condition created, or other action taken by a student or employee for the purpose of intimidation that is directed toward a student because the student initiated an allegation of unlawful harassment/retaliation or participated in an investigation of an allegation. 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. Any individual who knowingly makes a false charge of unlawful harassment/discrimination or retaliation, or who is untruthful during an investigation may be subject to disciplinary action, up to and including expulsion or dismissal. [TCSG Procedure 6.1.2p.]

## STUDENT DISCIPLINE

CGTC reserves the right to maintain a safe and orderly educational environment for students and staff. Therefore, when, in the judgment of CGTC officials, a student's conduct disrupts or threatens to disrupt the CGTC community, appropriate disciplinary action will be taken. This procedure is intended to provide an orderly protocol for handling student disciplinary cases in accordance with the principles of due process and justice.

## Definitions

- **Academic Misconduct:** includes, but is not limited to, the definition found in the Student Code of Conduct.
- **Business Days:** weekdays that the CGTC administrative offices are open.
- **CGTC Official:** any person employed by CGTC performing assigned responsibilities on a part-time, full-time, or adjunct basis.
- **Faculty Member:** any person hired by CGTC to conduct teaching, service, or research activities.
- **Hearing Body:** any person or persons authorized by CGTC's President to provide a hearing as provided in this procedure.
- **Jurisdiction:** Generally, CGTC jurisdiction and discipline shall be limited to conduct which occurs on CGTC premises, off-campus classes, activities, or functions sponsored by CGTC.
- **Member of the CGTC community:** any person who is a student, faculty member, contractor, CGTC official, or any other person/s involved with CGTC, involved in the community, or employed by CGTC.
- **Policy:** the written regulations of CGTC as found in, but not limited to, the Student Code of Conduct, Catalog, the CGTC Policy Manual, and the Policy Manual approved by the State Board for the Technical College System of Georgia.
- **Premises:** all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by CGTC (including adjacent streets and sidewalks).
- **Suspension:** denial to a student of the right to attend CGTC for a minimum of one semester.
- **Student:** all persons taking courses at CGTC, including full-time, part-time, dual enrollment, joint enrollment, non-credit, and credit. Persons who are not officially enrolled for a particular term but who have a continuing relationship with CGTC are also considered "students."

## Filing a Complaint

Any person may file a complaint with the Executive Director of Conduct, Appeals & Compliance (Executive Director of CAC) 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 Executive Director of CAC.

## Investigation and Decision

1. Within five business days after receipt of the Student Code of Conduct Complaint Form, the Executive Director of CAC 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 Executive Director of CAC shall

determine whether the student committed the alleged conduct, and whether the alleged conduct constitutes a violation of the Student Code of Conduct.

2. The student shall have five (5) business days from the date contacted by the Executive Director of CAC to schedule the meeting. This initial meeting may only be rescheduled one time. If the student fails to respond within five (5) business days to schedule the meeting, reschedules the meeting more than once, or fails to appear at the meeting, the Executive Director of CAC will consider the available evidence without student input and make a determination.
3. 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.
4. If the Executive Director of CAC determines that the student has violated the Student Code of Conduct, one or more disciplinary sanctions may be imposed consistent with those described in the Disciplinary Sanctions section. If it is determined that the conduct was not a violation of the Student Code of Conduct, disciplinary sanctions shall not be imposed on the student and the investigation shall be closed.

## Disciplinary Sanctions

Based on the severity of the incident, the Executive Director of CAC may take one of the following actions:

1. After a determination that a student has violated the Student Code of Conduct, the Executive Director of CAC 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.
  - a. **Restitution:** A student who has committed an offense against property may be required to reimburse CGTC 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.
  - b. **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 College community, and that any further violation may result in more serious sanctions.
  - c. **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 College in any way, denial of use of facilities, alteration or revocation of parking privileges, or restrictions from participating in extracurricular activities.
2. After a determination that a student has violated the Student Code of Conduct, the Executive Director of CAC may recommend the imposition of one of the following sanctions if appropriate. The Executive Director of CAC's recommendation will be forwarded to the Hearing Body, which may impose one or more of the following sanctions, as well as those described in the section above. A copy of the written recommendation shall be provided to the student and the person filing the complaint.
  - d. **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.
  - e. **Failing or lowered grade:** In cases of Academic Misconduct, the Executive Director of CAC will make a recommendation to the Vice President for Academic Affairs or his/her designee. Unless otherwise stated in the course syllabus and/or program handbook, students caught in actions of academic misconduct will, on the first offense, be given a grade of zero (0) on the exam or assignment. On the second offense, students will be dismissed from class and assigned a grade of "WF" (Withdrawal Failing) for the course. Repeated offenses will be referred to the appropriate administrator for further disciplinary action, which may include suspension from the college.

**c. System-Wide Expulsion:** Where a student has been expelled or suspended three times from the same or a 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.

**d. Violation of Federal, State, or Local Law:**

1. 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 CGTC's vital interests and stated mission and purpose.
2. 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.
3. When a student is charged by federal, state, or local authorities with a violation of law, CGTC will not request or agree to special consideration for that individual because of his/her status as a student. CGTC 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.

**e. 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 Executive Director of CAC or the College President's designee 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 CGTC community or its guests, or that the continued presence of the student on campus creates a risk of substantial disruption of classroom or other CGTC-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.

**f. Conditions of Disciplinary Suspension and Expulsion:**

1. A student who has been suspended or expelled from CGTC shall be denied all privileges afforded a student and shall be required to vacate CGTC premises at a time determined by the Executive Director of CAC or the College President's designee.
2. In addition, after vacating CGTC premises, a suspended or expelled student may not enter upon CGTC premises at any time, for any purpose, in the absence of written permission from the Executive Director of CAC or the College President's designee. A suspended or expelled student must contact the Executive Director of CAC or the College President's designee for permission to enter CGTC premises for a limited, specified purpose.
3. If the student seeks to submit a signed CGTC Disciplinary Sanction Appeal Form, the Executive Director of CAC or the College President's designee must accept the form by mail or fax if he/she refuses the student's request to enter CGTC premises for that specified purpose.
4. A scheduled appeal hearing before the Hearing Body shall be understood as expressed permission from the Executive Director of CAC or the College President's designee for a student to enter the CGTC premises for the duration of that hearing.

### Mediation

CGTC 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.

### Hearing/Appeals Procedure

A student who wishes to appeal a disciplinary decision by the Executive Director of CAC or the College President's designee regarding an assigned sanction of restitution, reprimand, restriction, disciplinary probation, or failing or lowered grade must file a written notice of appeal through the 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.

1. If the Executive Director of CA&C or the College President's designee recommends a sanction of disciplinary suspension, disciplinary expulsion, interim disciplinary suspension, or system-wide expulsion, the matter will be referred to the Hearing

Body. 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.

2. The student will then have the right to appear in a hearing before a Hearing Body assigned by the 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 College President and the Executive Director of CAC in writing of the Hearing Body's decision. The College President or his/her designee will notify the student in writing of the Hearing Body's decision.
3. If the student appeared before the Hearing Body to appeal the Executive Director of CAC or the College President's designee 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.
4. If the student appeared before the Hearing Body after the Executive Director of Conduct, Appeal & Compliance or the technical college president's designee recommends disciplinary suspension, disciplinary expulsion, interim disciplinary suspension, or system-wide expulsion, the student shall have the opportunity to appeal directly to the College President.
5. 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.
6. The College President 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 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.

### **Academic Appeals**

After informally attempting to have concerns resolved, a student may appeal a final grade or other academic decision in accordance with the Academic Grade Appeal procedure which is listed in the Academic Affairs section of the catalog.

### **Financial Aid Appeals**

A student may appeal a Financial Aid decision with which he/she disagrees. Any dispute a student may have with regards to a semester financial aid award amount or institutional charge (tuition, fee, book) on his/her record may appeal in writing within 10 days of the last day of the specific semester the award or charge occurred. Procedures for submitting appeals for financial aid reinstatement can be found in the Financial Aid section of this catalog,



# Academic Policies and Procedures

## GRADES

CGTC observes a uniform procedure for calculating grade point averages: all grades will be assigned based upon a 4.0 grading scale. Final course grades are posted by faculty at the end of each semester; the Registrar's Office then processes the grades and academic standing. All courses in degree, diploma, and technical certificate programs require a grade of "C" or higher in order to satisfy program requirements. Students are responsible for viewing their grades, academic history, and academic standing online each semester through BannerWeb.

### Grading System

Description	Letter Grade	Grade Points
90 - 100 (Excellent)	A	4.0
80 - 89 (Good)	B	3.0
70 - 79 (Satisfactory)	C	2.0
60 - 69 (Poor)	D	1.0
Below 60 (Failing)	F	0.0
Withdrawal Failing	WF	0.0
Grades not calculated in grade point average		
Articulated Credit	AC	–
Audit/Warranty Claim	AU	–
Credit by Exam	EX	–
Incomplete	I	–
In Progress	IP	–
Satisfactory	S	–
Transfer Credit	TR	–
Unsatisfactory	U	–
Withdrawal	W	–
Withdrawal Passing	WP	–

**Articulated Credit (AC):** Advanced placement may be awarded for high school coursework completed under formal articulation agreements when established competencies have been achieved and verified by examination. A grade of AC will be given for the course(s). Grades for AC courses over five (5) years of age will not be accepted for credit.

**Audit (AU):** Students who request and are approved to audit a course will receive no credit or financial aid. Students returning to CGTC to repeat a course(s) under the Warranty Claim will receive a grade of AU for the Warranty Claim course work.

**Exemption Exam (EX):** Exemption credit is awarded based on course competency testing. Academic credit is awarded but not calculated in the GPA. (See Credit by Course Competency Exam under Advanced Placement.)

**Failing (F):** Signifies that a student has completed the term;

however, the student did not academically meet full course requirements. This grade is calculated as a failing grade (F) in the student's GPA and may affect academic status and financial aid.

**Incomplete (I):** May be given to a student that has satisfactorily completed a substantial portion of the coursework, but has not been able to complete all of the requirements of the course. The student must have instructor approval for an I grade to be issued. No credit is given and no grade points are calculated. An Incomplete must be removed within the first ten school days of the next semester, or a grade of F will be issued. Extraordinary circumstances may merit an appeal for an extension of time. Extensions of time must be requested by the instructor and approved by the designated Academic Affairs administrator. If an I is received in a prerequisite course, as student may not register for advanced courses without permission of the instructor and designated Academic Affairs administrator.

**In Progress (IP):** In individualized credit-level courses, this grade indicates that a student is taking a course which requires coursework beyond the present semester. When students are issued an IP, no credit is given, and no grade points are calculated. The IP remains on the students' record for the term for which it was issued. There is a limit of two attempts to complete an IP course (i.e., If a student earns an IP in a course, he/she will need to reregister for the course and will have one additional semester to finish the incomplete assignments so that a course grade can be issued for the subsequent term).

**Satisfactory (S):** Indicates that the student has successfully mastered all of the course competencies and is reserved for learning support classes only. A grade of S carries no quality points, but institutional credit hours for that course will be awarded to the student.

**Transfer Credit (TR):** Indicates that the specific course was taken at an accredited postsecondary institution. For TR credit to be awarded, an official transcript from that institution must be provided to CGTC's Registrar Office for review. Academic credit is awarded but not calculated into the GPA. Transfer credit grades may be used for the purpose of calculating selection GPAs for select competitive admission programs.

**Unsatisfactory (U):** Indicates that the student did not master all of the course competencies and is reserved for learning support classes only. A grade of U carries no quality points, but does factor into course completion rate, and institutional credit hours for that course will be awarded to the student.

**Withdrawal (W):** Signifies that a student withdrew up to the published deadline. There is no academic GPA penalty for W grades, but attempted credit hours count toward the student's course completion rate and may affect academic status and financial aid.

**Withdrawal Passing (WP):** Signifies that a student withdrew or was administratively withdrawn from the class with a passing course average. A student may also be granted a WP grade due to extenuating circumstances through a grade appeal. There is no GPA penalty assigned for WP grades, but attempted credit hours count toward the student's course completion rate and may affect academic status and financial aid.

**Withdrawal Failing (WF):** Signifies that a student withdrew or was administratively withdrawn with a failing grade. A WF is given to students under the following conditions: Student withdraws after the published deadline with a failing average at the time of withdrawal; Student is administratively withdrawn for excessive absences with a failing average at the time of withdrawal; or Student is administratively withdrawn for code of conduct violation. This grade is calculated as a failing grade (F) in the student's GPA and may affect academic status and financial aid.



## Work Ethics Grades

CGTC instructs and evaluates students on their work ethic in all programs of study. Ten work ethic traits have been identified and defined as essential for student success: appearance, attendance, attitude, character, communication, cooperation, organizational skills, productivity, respect, and teamwork. All students in credit classes (except general education and learning support) receive a work ethics grade in addition to their regular course grade. The work ethics grade is not calculated in the academic grade point average, but will be printed on student transcripts.

### Work Ethics Grading System

Work Ethics Grade	Description
3	Exceeds Expectations
2	Meets Expectations
1	Needs Improvement
0	Unacceptable

## Grade Point Average

The semester grade point average is calculated based on all credit courses taken each semester at CGTC. Grade point averages will be rounded to the nearest hundredth in determining the semester and the cumulative GPA.

The **cumulative grade point average** (CGPA) reflects 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 program of study, or student classification. The CGPA is calculated at the end of the semester on all attempts for all credit courses taken at CGTC.

The **graduation grade point average** is calculated only on those courses required for graduation from the student's declared major. 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 needed for graduation.

### Calculation of Grade Point Average

Grade point average (GPA) is calculated by:

1. multiplying the grade points associated with the grade earned by the credit hours for each course
2. totaling the points earned for all courses
3. dividing the total points earned by the total number of credits attempted

### Example of GPA Calculation

Course	Grade	Grade Points	Credit Hours	Total Points
ENGL 1010	B	= 3	x 3	= 9
MATH 1012	C	= 2	x 3	= 6
COMP 1000	A	= 4	x 3	= 12
<b>Total Number of Credits Attempted....</b>				<b>9</b>
<b>Total Points Earned for All Courses.....</b>				<b>27</b>

$$\text{Grade Point Average} = \frac{\text{Total Points Earned for All Courses}}{\text{Total Number of Credits Attempted}} = \frac{27}{9} = 3.00$$

## Grade Appeals

After informally attempting to have concerns resolved, a student may appeal a final grade or other academic decision in accordance with the procedure outlined below. The procedures below relate to academic appeals only; procedures for submitting appeals for financial aid reinstatement can be found in the financial aid section of this catalog.

Absent extraordinary circumstances, the appeal must be filed, in writing, within one semester from the date the disputed grade was issued or other action complained of occurred. CGTC reserves the right to refuse consideration of appeals initiated more than one calendar year following the time that the dispute arose or the disputed grade was issued.

Appeals concerning the construction or administration of laws, policies, standards, or procedures related to the operation of this institution shall follow the procedures outlined below. Any CGTC employee engaged in counseling or advising students concerning the appeals process will comply with the provisions contained in this procedure.

### Procedure

If the student is appealing a final course grade, it is recommended that a student initially discuss their final course grade with the instructor who assigned the grade. If no solution to the concern is reached, a student has the right to file a written request for review in accordance with the guidelines outlined below.

1. Appeals should be addressed in writing, using the Request for Appeal Form, available online or through any campus Academic Affairs Office. The appeal will be forwarded to the appropriate program dean or other administrator who has the authority to resolve the matter. The appropriate administrator will resolve the complaint within twenty (20) business days, notify the student of the decision in writing, and provide a copy of the record to the Academic Affairs Office.
2. If the student is not satisfied with the resolution, the student may appeal the adjudication to the Assistant Vice President for Academic Affairs. The appeal must be in writing and be filed within

ten (10) business days from the time the student has been notified of the earlier appeal decision. The written statement should clearly outline the student's concerns with the appeal decision and make a supported case for the requested resolution. The Assistant Vice President for Academic Affairs will resolve the complaint in a timely manner, in writing, making a record of the complaint, the resolution, and the process to adjudicate the matter.

3. The final level of appeal is through the Vice President for Academic Affairs following the same procedure outlined in #2 above. The decision of the Vice President for Academic Affairs shall be final.

Communication of the results of the appeal will be provided to the student through their student email address. Date requirements as outlined in this policy will be based on the date the written appeal is submitted by the student and the emailed decision is sent to the student by the reviewing administrator.

Students in programs or courses directed by prerequisite courses may continue the next course in the sequence at their own risk. If a failing grade is not changed, the student must retake the class, if needed for completion of their program of study and must withdraw from the course requiring the pre-requisite. Tuition and/or fee refunds will be given only within the guidelines governing refunds.

## Grade Change

The official grade change period is the first ten school days of the next semester following when the course grade in question was awarded. If a student has a course grade in question, they should see the appropriate course instructor or refer to the Grade Appeal procedures in the catalog. If a grade change is warranted, the course instructor or designated Academic Affairs administrator will submit the official Grade Change Form to the Registrar's Office.

# ACADEMIC STANDING AND PROGRESS

## Academic Standing

### Good Standing

Academic good standing means that a student is eligible to enroll or re-enroll. To be in academic good standing, a student must have a cumulative grade point average of 2.0 or higher, must successfully complete at least 67% of all coursework attempted, and must complete his/her program of study within 150% of the published length of the program measured in credit hours attempted.

## Academic Warning

A student who earns a cumulative grade point average below a 2.00 or fails to successfully complete at least 67% of the course work attempted will be placed on academic warning the next semester of enrollment.

## Academic Probation

A student who earns a cumulative grade point average below a 2.00 or fails to successfully complete at least 67% of the course work attempted while enrolled on academic warning will be placed on academic probation for the next semester of enrollment and must appeal to the Financial Aid Office to regain financial aid eligibility.

## Academic Suspension

A student who earns a cumulative grade point average below a 2.00 or fails to successfully complete at least 67% of the course work attempted while enrolled on academic probation will be suspended for one semester and is no longer eligible to receive financial aid. Upon readmission, a student will be placed on academic probation for the next semester enrolled. Students placed on academic suspension who have demonstrated satisfactory academic progress (SAP) in their most recent enrolled term, or who can demonstrate extenuating circumstances affecting academic performance, have the right to appeal the suspension to the Vice President for Academic Affairs to request registration reinstatement for the suspended term.

## Satisfactory Academic Progress

Students are considered to be making satisfactory academic progress (SAP) if they are in good standing or on academic warning. Students on academic probation are allowed to register for classes. For information on satisfactory academic progress and financial aid eligibility, please refer to the financial aid section of the catalog.

## Honor Rolls

### President's Honor Roll

The President's Honor Roll is compiled each semester. To qualify, students must:

- Be in academic good standing
- Earn a semester grade point average of 4.0
- Have an earned course load of at least 12 credit hours for the semester
- Earn a work ethics grade of 2 or higher for each course in which a work ethics grade is assigned

Learning support courses are not included in the credit hour or GPA calculation.

### Academic Honor Roll

The Academic Honor Roll is compiled each term. To qualify, students must:

- Be in good academic standing
- Attain a semester grade point average of 3.5 or higher
- Earn a work ethics grade of 2 or higher for each

course in which a work ethics grade is assigned

It is not necessary for a student to be enrolled full-time in order to be placed on the Academic Honor Roll. Learning support courses are not included in the credit hour or GPA calculation.

## ACADEMIC POLICIES

### Academic Misconduct

CGTC considers academic integrity an integral part of the learning environment and integrity of the College. Please reference the Student Code of Conduct and Student Discipline sections for definitions of academic misconduct and the disciplinary sanctions for students who are found in violation.

### Academic Reinstatement

To be reinstated following the dismissal or suspension period, a student must submit a readmission application to the Admissions Office at the beginning of any term. Following an academic suspension, reinstated students will be referred for academic and career counseling and will be subject to the specific academic requirements of their program. Students reapplying for admission after their program curriculum has changed will normally be required to meet the requirements of the new curriculum. Students enrolled in competitive Health Science programs should refer to the specific academic requirements for the specific program of study.

### Advanced Placement

Advanced placement allows a student to receive course credit based on previous training and education or experience determined equivalent to courses offered at Central Georgia Technical College. Advanced placement includes:

#### Transfer Credit

See Transfer Students and Transfer Student Admission requirements.

#### Credit by Course Competency Exam

Upon request and approval, a competency exam may be administered to a student to determine if the student has already gained mastery of the course competencies. Courses may be exempted through competency testing or nationally normed exams such as College Level Examination Program (CLEP), Proficiency Examination Program (PEP) and Advanced Placement (AP) Examination of the College Entrance Examination Board. Institutional exemption exams for demonstrating written and/or performance mastery are available within the instructional programs for certain courses. Some exemption exams may require a fee and/or specific testing materials. Please refer to CGTC's Prior Learning Assessment (PLA) handbook for more information.

If a student has previously attempted, audited, failed,

or withdrawn from a course after the drop/add period at CGTC, the student cannot receive credit for that course by exemption examination. The student will be allowed only one exemption attempt per course. If a given course has a prerequisite course requirement, the prerequisite must be satisfied by either exemption or successful completion of the course before exemption may be attempted.

If a student exempts a course, credit is given but no grade points are calculated for that course. Exemption credit earned is considered toward total hours earned but does not count toward hours carried for the semester. Course exemption may affect the full-time status of a student. Students exempting coursework must meet CGTC's minimum residency requirements as defined in the catalog in order to be eligible for a CGTC degree, diploma, or technical certificate.

**Students are responsible for the cost of the exempted classes and financial aid is not available for exempted courses.**

**Students enrolled in Health Science programs should refer to the specific academic requirements and transfer policies for the Health Science programs in the Health Science section of the CGTC Catalog.**

## Attendance

### Attendance Requirements

The educational programs at CGTC reflect the requirements and standards that are necessary for future successful employment in business and industry. Employers expect their employees to be present and to be on time for work each and every day; as such, CGTC expects each student to be present and to be on time each and every day for all classes. Documented absences for military duty, jury duty, and/or observed religious holidays, judicial proceedings in response to a subpoena, summons for jury duty, or other court-ordered process which requires the attendance of the student at the judicial proceeding are excused. Students absent from class for any reason are still responsible for all work missed. Students should enroll only in those classes that they can reasonably expect to attend on a regular basis.

Instructors have both the right and the responsibility to develop reasonable attendance policies appropriate to the type, level, delivery method, and frequency of class meetings for their course; to communicate the policies to students clearly; and to apply the policies fairly and consistently to all enrolled students. Specific attendance requirements are established by each program area and are outlined in the course syllabus.

To remain on the class roster, all enrolled day students are required to attend at least one of the first two days of class to maintain assurance of enrollment for any assigned class. All evening students are required to attend the first evening or night of class to maintain assurance of enrollment for any initial assigned class. All online students must submit their first assignment within the first week of the course. Students not meeting attendance verification requirements may be dropped from the class.

### Attendance for Online Delivery

In the online classroom environment, attendance is demonstrated through active participation. Online students must complete an academically related activity each week to be considered actively participating. Simply logging into an online class is not considered being active and does not count toward attendance.

### Attendance Scores

Attendance is documented in terms of hours of class time. Other attendance codes include:

Attendance Code	Description
A	Absent
E	Excused*
H	Holiday
NC	No Class

*\* Documented absences for military duty, jury duty, observed religious holidays, judicial proceedings in response to a subpoena, summons for jury duty, or other court-ordered process that requires the attendance of the student at the judicial proceeding are excused.*

### Attendance Records

The official record of attendance for all students in a class is maintained by the course instructor. It is the official record in all matters pertaining to entrance, attendance, and completion.

### Attendance Dismissal

At any time during the semester, faculty may identify students who have stopped attending. Any student who fails to attend a course for fourteen (14) consecutive calendar days or violates the respective course attendance policy may be administratively withdrawn from a course. Students submitted as “stopped attending” will be dismissed from the class for which they exceeded the attendance policy and will receive a grade of WP or WF, based on the student’s course average at the last date of attendance. This policy applies to all students regardless of delivery method. Re-entry into CGTC will vary according to the nature of the instructional program. The cause of the excessive absenteeism should be resolved prior to re-entry.

### Auditing a Course

A student who wishes to register for a credit course for no credit may register to audit the course and will be accepted on a space availability basis. Some courses may require documentation from the potential student’s employer or evidence of previous postsecondary training before approval for audit may be granted. Courses taken on an audit basis are non-credit and will not be used for certification for financial aid, WIOA, Social Security, or Veterans Administration educational benefits. A student who audits a course cannot take an advanced standing or credit examination and receive credit for the audited course and an audit grade may not be changed later to a credit grade. Students auditing a course(s) must

pay the regular tuition and fees and attend class observing all academic policies and procedures. Approval to audit a course must be obtained from the Director for Enrollment Services and the respective Academic Affairs Dean or designated administrator.

### Class Cancellation

Courses are offered when enrollment and instructor availability make it feasible. Courses are subject to cancellation without prior notice. Every course is not Offered: every semester at any and/or all locations.

### Course Expiration

CGTC has an expiration date on certain courses to ensure that our graduates are current in their chosen field of study. Courses transferred into CGTC from another accredited postsecondary institution must meet admissions guidelines for transfer students. For courses taken at CGTC, unless otherwise stated, the following time limits apply:

Course Description	Time Limit*
Computer Information Systems (all CIST courses)	5 years
All other occupational courses (including COMP 1000)	10 years
General education courses	Do not expire

*\* Exceptions to course expiration time limits include time limits as published for competitive health program selection.*

Expired courses must be retaken or, if applicable, exempted through Credit by Examination. In addition, at the discretion of the program chair, students may be required to repeat coursework based on changes in the course content and/or industry standards. Students may appeal course expiration decisions to the Office of Academic Affairs for review by the appropriate Dean, in consultation with the Registrar.

### Course Load

Twelve or more credit hours per semester constitutes full-time student status. Students who take fewer than 12 credit hours per semester are considered to be part-time. Most programs will require registering for a minimum of 15 credit hours per term for timely completion of a program of study. A student attempting over 18 credit hours a semester must receive prior approval from their faculty advisor before registering for additional courses. Overload approval may be granted only to students with a 3.0 GPA or higher, who have demonstrated satisfactory academic status in their previously attended term, and who have completed all learning support requirements.

### Course Progression

The Technical College System of Georgia has mandated the sequence of some courses in each program. These courses are identified in the course descriptions as prerequisite or co-requisite. A course

identified as prerequisite must be successfully completed with a grade of C or better prior to taking certain courses. A course identified as co-requisite may be taken in conjunction with other courses. The Course Description Section in the catalog identifies the prerequisite and co-requisite requirements for all courses offered. In addition, other requirements for taking each course, and program admission requirements, are identified. Requests to waive prerequisite and co-requisite course requirements must be submitted in writing to the Academic Affairs Dean in the student's program major area.

## Curriculum Changes

CGTC is continuously updating and modifying instructional programs to stay abreast of the rapidly changing technologies in business and industry. Therefore, curriculum may be changed while a student is enrolled in a program. If this should occur, the presently-enrolled student will not be penalized, nor will the length of the program be extended for the student because of a curriculum change. The student will be converted to the new curriculum standards at the beginning of a new phase of training, course, or semester, whichever is appropriate for the particular program. Students who do not maintain continuous semester enrollment will re-enter the College under the most recent curriculum for their program of study.

## Majors/Programs

### Declaration of a Major

Students are required to declare a major to ensure that the student's occupational goals and objectives can be met by the institution. Students may make a program change prior to enrollment without it counting as a program change. The student's admission status is determined by the major selected and the admission requirements for that major.

### Dual Majors

The opportunity to pursue a double major is available to students. All requirements for each selected programs, as listed in the catalog, must be satisfied in order for a student to receive both awards.

### Change in Major/Program

Students wishing to change their major must submit a Change Program form through the Student Portal. Students should consult with a program advisor and financial aid prior to changing their major in order to ensure they are making the best decision. Courses previously satisfactorily completed, which are applicable to the new major, will be utilized. A change of major may impact the length of time required to meet program requirements. Students must meet the academic criteria for the new program requested and/or meet any Learning Support requirement(s) for the new program of study. Financial aid recipients' eligibility and award may be affected by a program/major change. Students who have completed or graduated from a program and wish to enroll in another major must complete a readmission application in the Admissions Office. Program changes must be submitted prior to registration and are allowed until the fifth day of the semester.

## Program Regulations

Specific programs of study may have written rules and regulations affecting its activities. Each student will be issued a copy of these regulations during the program orientation. Students should be thoroughly familiar with the program regulations and CGTC catalog. Regulations contained in both documents are set forth to guide students in their daily activities while at CGTC.

## Practicum, Internship, Co-Op and Clinical Courses

Practicum, internships, co-op, and clinical courses provide valuable experiential learning opportunities for students to satisfy the credit requirements of a given program. In order to receive academic credit, the experience must be in an approved site and in the career field for which the student has trained. Students are required to meet all hour requirements for the duration of the approved work experience; to dress according to the standards set by the affiliating agency; and to abide by the regulations of the affiliating agency, as well as the CGTC Code of Conduct. Failure to meet any of these guidelines may result in a failing grade or withdrawal from the work experience.

### Travel

Students enrolled in off-campus practicum, internship, externship, co-op, or clinical courses will be required to travel to businesses, industries, and hospitals. All travel arrangements and costs are the responsibility of the student.

### Pay

The employer is under no obligation to pay the student wages or to offer the student a permanent position after the work experience has been completed.

## Repeating a Course

To meet academic requirements, a student may be required to repeat a course. With faculty advisor approval, students may repeat a course to improve their background in a subject area, raise their GPA for graduation, better position themselves for competitive program selection, or ensure transferability of courses completed. A student who unsuccessfully attempts a course two times may not be allowed to repeat the course without prior approval from the designated Academic Affairs Dean. A student has two opportunities to pass any one level of Learning Support; if the student does not satisfactorily complete the course in two semesters, the student will be referred to the Academic Success Center.



# Academic Programs

# ACADEMIC PROGRAMS

Instruction is balanced between classroom activities and laboratory experiences, and is relevant to the specific occupation in which the student is training. State standards for curricula and program structure are implemented in all credit programs. Credit programs are Offered: in five primary areas: Aerospace, Trade, and Industry; Business and Computer Technologies; Health Sciences; Public Safety and Professional Services; and General Studies.

## Associate Degree Programs

An associate of applied science (AAS) degree (associate of science for the Nursing program) may be earned at CGTC in specified credit programs, as approved by the Technical College System of Georgia. The associate degree includes a sequence of courses in the fundamental and specific occupational requirements which prepare the student for an advanced degree in his/her program choice. The associate degree programs offer the academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The associate degree programs emphasize theory and practical application. Electives pertaining to the student's chosen field of interest are also available. Associate degree programs must be at least 60 semester credit hours in length.

## Diploma Programs

Diploma programs are Offered: on a credit-hour basis; these programs vary in length from 37 to 59 credit hours. Diploma programs provide the theory, functions, and practical application of skills needed for entry-level employment and/or re-training to update marketable skills. Diplomas are awarded to those who successfully complete the program requirements.

## Technical Certificate Programs

Technical certificates of credit (TCC) are a coherent grouping of courses taken from any state approved postsecondary standard curriculum. The technical certificate program must be at least nine semester credit hours in length and may not exceed 36 semester credit hours.

## Georgia Virtual Technical Connection

The Georgia Virtual Technical Connection (GVTC) is made up of contributing postsecondary technical colleges. The GVTC members work together to create courses and programs using the Internet as a delivery medium. With approval from CGTC, students can enroll and complete online courses at other TCSG colleges as a transient student. Additional information is available on the GVTC website located at [www.gvtc.org](http://www.gvtc.org).

## Online and Hybrid/Blended Courses

CGTC offers a wide range of online courses that use the Internet to deliver online learning that is independent of time and location. Some online courses require campus visits for exams and/or hands-on labs and some require proctored assignments.

BlendFlex is an innovative course delivery method that offers flexible attendance options for select CGTC

courses. BlendFlex classes allow students to attend on campus, online, from remote sites, or from home or work in any combination during the semester.

Students enrolled in online or hybrid/blended courses must adhere to all policies and procedures set forth by the College. Students may not share login credentials (i.e., usernames, student ID numbers, passwords, etc.) for any online course system with anyone. Violations to this procedure will fall under the College's Code of Conduct rules. For more information on distance education, including online student resources, FAQs, online orientation information, contacts, and a link to the CGTC help desk, visit [www.centralgatech.edu/online-classes](http://www.centralgatech.edu/online-classes).

## General Education Core Courses

The purpose of general education coursework is to ensure that students have attained general essential skills necessary for educational and career success. Each degree and diploma program at CGTC contains a body of Essential General Core (general education) courses. The Essential General Core within each degree and diploma program is designed to produce graduates who, at the competency level appropriate to the credential earned, can communicate appropriately; utilize information technology in accessing, organizing, and communicating information; apply appropriate mathematical principles and methods; and use critical thinking skills to solve problems. Each degree and diploma program additionally requires the assessment of computer competency.

To ensure these competencies, each associate degree program of study contains a minimum of 15 semester credit hours in general education courses comprised of coursework from four categories: language arts/communications, social/behavioral sciences, natural sciences/mathematics, and humanities/fine arts. These courses are listed in the following section:

### Associate Degree

#### Area I - Language Arts/Communications

ENGL 1101	Composition and Rhetoric	3
ENGL 1102	Literature and Composition	3
ENGL 1105	Workplace and Technical Communications	3
SPAN 1101	Introduction to Spanish Language and Culture I	3
SPCH 1101	Public Speaking	3

#### Area II - Social/Behavioral Sciences

ECON 1101	Principles of Economics	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	Introduction to Psychology	3
PSYC 2250	Abnormal Psychology	3
SOCI 1101	Introduction to Sociology	3

#### Area III - Natural Sciences/Mathematics

BIOL 1111	Biology I	3
BIOL 1111L	Biology Lab I	1
BIOL 1112	Biology II	3



BIOL 1112L	Biology Lab II	1
BIOL 2113*	Anatomy and Physiology I	3
BIOL 2113L*	Anatomy and Physiology Lab I	1
BIOL 2114*	Anatomy and Physiology II	3
BIOL 2114L*	Anatomy and Physiology Lab II	1
BIOL 2117*	Introductory Microbiology	3
BIOL 2117L*	Introductory Microbiology Lab	1
CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
CHEM 1212	Chemistry II	3
CHEM 1212L	Chemistry Lab II	1
MATH 1101	Mathematical Modeling	3
MATH 1103	Quantitative Skills and Reasoning	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MATH 1113	Pre-Calculus	3
MATH 1127	Introduction to Statistics	3
MATH 1131	Calculus I	4
MATH 1132	Calculus II	4
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PHYS 1111	Introductory Physics	3
PHYS 1111L	Introductory Physics Lab	1

\*May be required by specific program, but not considered general education electives

#### Area IV - Humanities/Fine Arts

ARTS 1101	Arts Appreciation	3
ENGL 2130	American Literature	3
HUMN 1101	Introduction to Humanities	3
MUSC 1101	Music Appreciation	3

#### Diploma

Each diploma program also includes a set of general education core courses providing background in mathematics, communications, and interpersonal skills:

#### Mathematics

MATH 1011	Business Math	3
MATH 1012	General Mathematics	3
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3

#### Communications

ENGL 1010	Fundamentals of English I	3
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#### Interpersonal Skills

EMPL 1000	Interpersonal Relations and Professional Development	2
PSYC 1010	Basic Psychology	3

#### Learning Support

Learning Support courses provide remedial support in reading, language, and math that will aid the student in mastering the skills needed for the chosen program of study. Assignment to Learning Support courses is based on the results of standardized placement tests and the competencies needed for the prospective program of study. Each program of study has established a description of entry-level reading, language, and math competencies. If test scores

indicate that the student is not academically prepared to enter a regular program of study, the student may be placed in one or more learning support courses and the study skills seminar (COLL 1500) course.

#### Learning Support Courses

ENGL 0090	Learning Support English	3
ENGL 0098	English III	3
MATH 0090	Learning Support Math	3
MATH 0098	Elementary Algebra	3
MATH 0099	Intermediate Algebra	3

#### Elective Courses

Elective courses are available to provide the student with extended opportunities to learn skills and competencies beyond the specific occupational curriculum. Additional electives may be specified in the occupational curriculum as required electives. These courses serve as support to the established curriculum and allow students to enhance the learning experiences relevant to their occupational/technical programs. Students should consult their academic advisor for a list of elective classes appropriate to their program of study.

#### Program and Course Transfer

CGTC participates in cooperative programs with multiple colleges and universities. Articulation Agreements apply to Associate Degree graduates from CGTC and allow those students to receive transfer credit toward specific degrees at receiving institutions. The aim of these agreements is to allow our students to transfer the knowledge they have gained at CGTC into programs at other institutions of higher learning. Complete information regarding CGTC's articulation agreements is available at [www.centralgatech.edu/articulation](http://www.centralgatech.edu/articulation).

Course Transfer is an agreement between Central Georgia Technical College and other Colleges and Universities to accept specific courses that students have taken at CGTC as substitutes for courses required at those institutions. For more information about these agreements, contact the Registrar at 478-218-3292.

The Mini-Core agreement is an agreement between the Technical College System of Georgia and the University System of Georgia. It guarantees the transfer of the courses from the BOR Transfer Chart (with a grade of C or better) from any TCSG college to University System of Georgia colleges and universities.



## Aerospace, Trade, and Industry

Air Conditioning Technology  
Aircraft Structural Technology  
Automotive Collision Repair  
Automotive Fundamentals  
Aviation Maintenance  
Cabinetmaking  
Carpentry  
Commercial Truck Driving  
Construction Management Technology  
Drafting  
Electrical Systems Technology  
Electronics Technology  
Engineering Technology  
Geographic Information Systems  
Industrial Systems Technology  
Machine Tool Technology  
Metrology  
Welding and Joining Technology

## AIR CONDITIONING TECHNOLOGY

### AIR CONDITIONING TECHNOLOGY (ACT2)

Diploma

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 have the qualification of an air conditioning technician.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ACT2](http://www.centralgatech.edu/gainfulemployment/ACT2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>43</b>
COMP 1000 Introduction to Computer Literacy	3
AIRC 1005 Refrigeration Fundamentals	4
AIRC 1010 Refrigeration Principles and 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 and Controls	4
AIRC 1060 Air Conditioning Systems Application and Installation	4
AIRC 1070 Gas Heat	4
AIRC 1080 Heat Pumps and Related Systems	4
ALHS 1090 Troubleshooting Air Conditioning Systems	4
<b>Total Hours</b>	<b>51</b>

### AIR CONDITIONING ELECTRICAL TECHNICIAN (ACK1)

Technical Certificate of Credit

Prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	Credit Hours
AIRC 1030 HVACR Electrical Fundamentals	4
AIRC 1040 HVACR Electrical Motors	4
AIRC 1050 HVACR Electrical Components and Controls	4
<b>Total Hours</b>	<b>12</b>

### AIR CONDITIONING TECHNICIAN ASSISTANT (AZ31)

Technical Certificate of Credit

This certificate offers courses designed to prepare students for refrigeration assistant positions within the HVAC industry. Topics include refrigeration fundamentals, refrigerator principles and practices, and system components.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins GDC

		Credit Hours
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles and Practices	4
AIRC 1020	Refrigeration Systems Components	4
<b>Total Hours</b>		<b>12</b>

### RESIDENTIAL AIR CONDITIONING TECHNICIAN (RA21)

Technical Certificate of Credit

Prepares students for entry level positions in the maintenance and repair of residential air conditioning systems.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/RA21](http://www.centralgatech.edu/gainfulemployment/RA21)

		Credit Hours
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1060	Air/Conditioning Systems Application and Installation	4
ALHS 1090	Troubleshooting Air Conditioning Systems	4
<b>Total Hours</b>		<b>16</b>

# AIRCRAFT STRUCTURAL TECHNOLOGY

## AIRCRAFT STRUCTURAL TECHNOLOGY (AST2) Diploma

Prepares students for careers in aircraft structures manufacture and repair. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of aircraft structural theory and practical application necessary for successful employment. Program graduates are qualified as aircraft structural specialists.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AST2](http://www.centralgatech.edu/gainfulemployment/AST2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
ASTT 1010 Basic Blueprint Reading	4
ASTT 1020 Aircraft Blueprint Reading	3
ASTT 1030 Structural Fundamentals	6
ASTT 1040 Structural Layout and Fabrication	6
ASTT 1050 Aerospace Quality Management	3
ASTT 1070 Aerodynamics	2
ASTT 1090 Composites and Bonded Structures	4
ASTT 1100 Sealants	2
ASTT 1110 Corrosion Control	5
ASTT 1120 Aircraft Metallurgy	4
ASTT 1180 Aircraft Technical Publications	3
<b>Total Hours</b>	<b>53</b>

## AIRCRAFT ASSEMBLY TECHNICIAN (AA61) Technical Certificate of Credit

Provides technical training to existing industry and individuals interested in obtaining aircraft structural assembly skills, and results from industry requesting new personnel with the skills addressed in the aircraft structural courses included in this program. This program will provide a minimum of training for job market entry and/or upgrading for existing industry personnel and could lead to continued training for a diploma.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

	Credit Hours
ASTT 1010 Basic Blueprint Reading	4
ASTT 1020 Aircraft Blueprint Reading	3
or ASTT 1070 Aerodynamics	(2)
ASTT 1030 Structural Fundamentals	6
<b>Minimum Total Hours</b>	<b>12</b>

## AUTOMOTIVE COLLISION REPAIR

### AUTOMOTIVE COLLISION REPAIR (ACR2)

Diploma

Prepares 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 automotive painting and refinishing. Program graduates are qualified as painting and refinishing technicians.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ACR2](http://www.centralgatech.edu/gainfulemployment/ACR2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>20</b>
COMP 1000 Introduction to Computer Literacy	3
ACRP 1000 Introduction to Auto Collision Repair	4
ACRP 1005 Automobile Component Repair and Replacement	4
ACRP 1010 Foundations of Collision Repair	5
ACRP 1015 Fundamentals of Automotive Welding	4
<i>Refinishing Specialization (8RS2)</i>	<i>12</i>
ACRP 2001 Introduction to Auto Painting and Refinishing	5
ACRP 2002 Painting and Refinishing Techniques	5
ACRP 2009 Refinishing Internship	2
or ACRP 2108 Refinishing Internship I	(1)
and ACRP 2109 Refinishing Internship II	(1)
<b>Minimum Total Hours</b>	<b>40</b>

### AUTOMOTIVE COLLISION REPAIR ASSISTANT I (AB51)

Technical Certificate of Credit

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, automotive welding techniques, and mechanical and electrical systems.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

		Credit Hours
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Automobile Component Repair and Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
<b>Total Hours</b>		<b>12</b>

# AUTOMOTIVE FUNDAMENTALS

## AUTOMOTIVE FUNDAMENTALS (AF12)

Diploma

Prepares 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 are qualified as entry-level technicians.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AF12](http://www.centralgatech.edu/gainfulemployment/AF12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>35</b>
COMP 1000 Introduction to Computer Literacy	3
AUTT 1010 Automotive Technology Introduction	2
<i>Automotive Electrical Course Options</i>	
AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I and AUTT 1022 Automotive Electrical Systems II	(4) (3)
AUTT 1030 Automotive Brake Systems	4
<i>Automotive Engine Performance Course Options</i>	
AUTT 1040 Automotive Engine Performance	7
or AUTT 1041 Automotive Engine Performance I and AUTT 1042 Automotive Engine Performance II	(3) (4)
AUTT 1050 Automotive Suspension and Steering Systems	4
AUTT 1060 Automotive Climate Control Systems	5
<b>Minimum Total Hours</b>	<b>43</b>

## AUTOMOTIVE TECHNOLOGY (AT14)

Diploma

Prepares 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 are qualified as well rounded entry-level technicians.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AT14](http://www.centralgatech.edu/gainfulemployment/AT14)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>47</b>
COMP 1000 Introduction to Computer Literacy	3
AUTT 1010 Automotive Technology Introduction	2
AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I and AUTT 1022 Automotive Electrical Systems II	(4) (3)
AUTT 1030 Automotive Brake Systems	4
AUTT 1040 Automotive Engine Performance	7
or AUTT 1041 Automotive Engine Performance I and AUTT 1042 Automotive Engine Performance II	(3) (4)
AUTT 1050 Automotive Suspension and Steering Systems	4
AUTT 1060 Automotive Climate Control Systems	5
AUTT 2010 Automotive Engine Repair	6
or AUTT 2011 Automotive Engine Repair I and AUTT 2012 Automotive Engine Repair II	(3) (3)
AUTT 2020 Automotive Manual Drive Train and Axles	4
AUTT 2030 Automotive Automatic Transmissions and Transaxles	5
<b>Minimum Total Hours</b>	<b>55</b>

**AUTOMOTIVE CHASSIS TECHNICIAN SPECIALIST (ASG1)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/ASG1](http://www.centralgatech.edu/gainfulemployment/ASG1)

	<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction	2
AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I	(4)
and AUTT 1022 Automotive Electrical Systems II	(3)
AUTT 1030 Automotive Brake Systems	4
AUTT 1050 Automotive Suspension and Steering Systems	4
<b>Total Hours</b>	<b>17</b>

**AUTOMOTIVE CLIMATE CONTROL TECHNICIAN (AH21)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction	2
AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I	(4)
and AUTT 1022 Automotive Electrical Systems II	(3)
AUTT 1060 Automotive Climate Control Systems	5
<b>Total Hours</b>	<b>14</b>

**AUTOMOTIVE ELECTRICAL/ELECTRONIC SYSTEMS TECHNICIAN (AE41)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

		<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction		2
AUTT 1020 Automotive Electrical Systems		7
<b>Total Hours</b>		<b>9</b>

**AUTOMOTIVE ENGINE PERFORMANCE TECHNICIAN (AE51)**

Technical Certificate of Credit

Introduces students to the knowledge and skills they will need as entry level automotive engine performance technicians. Topics covered include: shop safety, electrical/electronic diagnosis, and diagnosis and service of fuel, ignition, emission and electronic engine controls.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/AE51](http://www.centralgatech.edu/gainfulemployment/AE51)

		<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction		2
<i>Automotive Electrical Course Options</i>		
AUTT 1020 Automotive Electrical Systems		7
or AUTT 1021 Automotive Electrical Systems I		(4)
and AUTT 1022 Automotive Electrical Systems II		(3)
<i>Automotive Engine Performance Course Options</i>		
AUTT 1040 Automotive Engine Performance		7
or AUTT 1041 Automotive Engine Performance I		(3)
and AUTT 1042 Automotive Engine Performance II		(4)
<b>Total Hours</b>		<b>16</b>



**AUTOMOTIVE ENGINE REPAIR TECHNICIAN (AE61)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction	2

*Automotive Electrical Course Options*

AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I	(4)
and AUTT 1022 Automotive Electrical Systems II	(3)

*Automotive Engine Repair Course Options*

AUTT 2010 Automotive Engine Repair	6
or AUTT 2011 Automotive Engine Repair I	(3)
and AUTT 2012 Automotive Engine Repair II	(3)
<b>Total Hours</b>	<b>15</b>

**AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR TECHNICIAN (ALR1)**

Technical Certificate of Credit

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 program will be able to pursue master level auto knowledge in the automotive technology diploma program.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction	2
AUTT 1011 Basic Auto Maintenance and Light Repair I	6
AUTT 1012 Auto Maintenance and Light Repair II	6
AUTT 1013 Auto Maintenance and Light Repair III	6
<b>Total Hours</b>	<b>20</b>

**AUTOMOTIVE TRANSMISSIONS/TRANSAXLE TECH SPECIALIST (AA71)**

Technical Certificate of Credit

Provides students with the skills to enter the automotive industry as an entry level transmission, transaxle, and drive line 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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/AA71](http://www.centralgatech.edu/gainfulemployment/AA71)

	<b>Credit Hours</b>
AUTT 1010 Automotive Technology Introduction	2
AUTT 1020 Automotive Electrical Systems	7
or AUTT 1021 Automotive Electrical Systems I	(4)
and AUTT 1022 Automotive Electrical Systems II	(3)
AUTT 2020 Automotive Manual Drive Train and Axles	4
AUTT 2030 Automotive Automatic Transmissions and Transaxles	5
<b>Total Hours</b>	<b>18</b>

## AVIATION MAINTENANCE

### AVIATION MAINTENANCE TECHNOLOGY (AM43)

Associate Degree

Provides students with an introduction to the occupational area of aviation maintenance as currently understood and practiced by Federal Aviation Administration (FAA) mechanic certificate holders with airframe and/or power plant ratings. In addition, the combined power plant and airframe curriculum is designed to provide students with the technical knowledge and skills required to diagnose problems and repair aircraft power plants, both reciprocating and turbine, their systems and components; and airframes, both metal and wood, their systems and components. Satisfactory completion of all program courses entitles students to participate in FAA power plant and airframe examinations and certification processes. CGTC is a FAA Part 147 Certificated school.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### General Education Core Courses

	Credit Hours
<b>Area I - Language Arts/Communication</b>	<b>15</b>
ENGL 1101 Composition and Rhetoric	3
<b>Area II - Social/Behavioral Sciences</b>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<b>Area III - Natural Sciences/Mathematics</b>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Area IV - Humanities/Fine Arts</b>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3

#### Occupational Courses

COMP 1000 Introduction to Computer Literacy	3	<b>82</b>
<i>General (the following courses are FAA approved)</i>		
AVMT 1000 Aviation Mathematics	2	
AVMT 1010 Aircraft Maintenance Regulations	2	
AVMT 1020 Aircraft Applied Sciences I	5	
AVMT 1025 Aircraft Applied Sciences II	4	
AVMT 1030 Aircraft Electricity and Electronics	5	
AVMT 1210 Aviation Physics	2	
<i>Airframe (the following courses are FAA approved)</i>		
AVMT 2010 Aircraft Airframe Structures	2	
or AVMT 2011 Aircraft Wood Structures, Coverings and Finishes	(1)	
AVMT 2020 Airframe Sheet Metal	2	
AVMT 2025 Airframe Non-Metallic Structure	2	
AVMT 2030 Airframe Welding	1	
AVMT 2040 Airframe Assembly and Rigging	2	
AVMT 2050 Airframe Inspection	4	
AVMT 2060 Airframe Hydraulic and Pneumatic Systems	2	
AVMT 2070 Aircraft Landing Gear Systems	3	
AVMT 2080 Aircraft Environmental Control Systems	3	
AVMT 2085 Aircraft Fuel and Instrument Systems	3	

AVMT 2090 Aircraft Electrical Systems	4
AVMT 2095 Aircraft Communication and Navigation Systems	2

*Powerplant (the following courses are FAA approved)*

AVMT 2210 Reciprocating Engine Powerplants I	3
AVMT 2220 Reciprocating Engine Powerplants II	4
AVMT 2230 Gas Turbine Powerplants I	3
AVMT 2240 Gas Turbine Powerplants II	3
AVMT 2260 Aircraft Engine Fuel and Fuel Metering Systems	4
AVMT 2270 Powerplant Instruments, Fire Protection and Electrical Systems	3
AVMT 2275 Powerplant Ignition and Starting Systems	4
AVMT 2280 Aircraft Powerplant Accessory Systems	3
AVMT 2285 Aircraft Propeller Systems	3
<b>Minimum Total Hours</b>	<b>97</b>

### AVIATION MAINTENANCE TECHNOLOGY (AM34)

Diploma

Provides students with an introduction to the occupational area of aviation maintenance technology as currently understood and practiced by Federal Aviation Administration (FAA) mechanic certificate holders with airframe and/or power plant ratings. In addition, the combined power plant and airframe curriculum is designed to provide students with the technical knowledge and skills required to diagnose problems and repair aircraft power plants, both reciprocating and turbine, their systems and components; and airframes, both metal and wood, their systems and components. Satisfactory completion of all program courses entitles students to participate in FAA power plant and airframe examinations and certification processes. CGTC is a FAA Part 147 Certificated School.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AM34](http://www.centralgatech.edu/gainfulemployment/AM34)

#### General Education Core Courses

EMPL 1000 Interpersonal Relations and Professional Development	2	<b>8</b>
ENGL 1010 Fundamentals of English I	3	
or ENGL 1101 Composition and Rhetoric	(3)	
MATH 1013 Algebraic Concepts	3	
or MATH 1012 Foundations of Mathematics	(3)	
<i>Effective Summer 2018 (201816)</i>		
or MATH 1111 College Algebra	(3)	

#### Occupational Courses

COMP 1000 Introduction to Computer Literacy	3	<b>82</b>
<i>General (the following courses are FAA approved)</i>		
AVMT 1000 Aviation Mathematics	2	
AVMT 1010 Aircraft Maintenance Regulations	2	
AVMT 1020 Aircraft Applied Sciences I	5	
AVMT 1025 Aircraft Applied Sciences II	4	
AVMT 1030 Aircraft Electricity and Electronics	5	
AVMT 1210 Aviation Physics	2	

<i>Airframe (the following courses are FAA approved)</i>	
AVMT 2010 Aircraft Airframe Structures	2
or AVMT 2011 Aircraft Wood Structures, Coverings and Finishes	(1)
AVMT 2020 Airframe Sheet Metal	2
AVMT 2025 Airframe Non-Metallic Structure	2
AVMT 2030 Airframe Welding	1
AVMT 2040 Airframe Assembly and Rigging	2
AVMT 2050 Airframe Inspection	4
AVMT 2060 Airframe Hydraulic and Pneumatic Systems	2
AVMT 2070 Aircraft Landing Gear Systems	3
AVMT 2080 Aircraft Environmental Control Systems	3
AVMT 2085 Aircraft Fuel and Instrument Systems	3
AVMT 2090 Aircraft Electrical Systems	4
AVMT 2095 Aircraft Communication and Navigation Systems	2
<i>Powerplant (the following courses are FAA approved)</i>	
AVMT 2210 Reciprocating Engine Powerplants I	3
AVMT 2220 Reciprocating Engine Powerplants II	4
AVMT 2230 Gas Turbine Powerplants I	3
AVMT 2240 Gas Turbine Powerplants II	3
AVMT 2260 Aircraft Engine Fuel and Fuel Metering Systems	4
AVMT 2270 Powerplant Instruments, Fire Protection and Electrical Systems	3
AVMT 2275 Powerplant Ignition and Starting Systems	4
AVMT 2280 Aircraft Powerplant Accessory Systems	3
AVMT 2285 Aircraft Propeller Systems	3
<b>Total Hours</b>	<b>90</b>

### AVIATION MAINTENANCE TECHNICIAN (AM24)

Technical Certificate of Credit

Prepares students for employment in the field of aviation maintenance as currently regulated by the Federal Aviation Administration (FAA). The program emphasizes a combination of aircraft maintenance theory and aircraft maintenance application. Satisfactory completion of all AMT program courses entitles students to participate in FAA airframe and powerplant (A&P) examinations and certifications. CGTC is a FAA Part 147 Certificated School.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AM24](http://www.centralgatech.edu/gainfulemployment/AM24)

#### *General (the following courses are FAA approved)*

	Credit Hours
AVMT 1000 Aviation Mathematics	2
AVMT 1010 Aircraft Maintenance Regulations	2
AVMT 1020 Aircraft Applied Sciences I	5
AVMT 1025 Aircraft Applied Sciences II	4
AVMT 1030 Aircraft Electricity and Electronics	5
AVMT 1210 Aviation Physics	2

#### *Airframe (the following courses are FAA approved)*

AVMT 2010 Aircraft Airframe Structures	2
or AVMT 2011 Aircraft Wood Structures, Coverings and Finishes	(1)
AVMT 2020 Airframe Sheet Metal	2

AVMT 2025 Airframe Non-Metallic Structure	2
AVMT 2030 Airframe Welding	1
AVMT 2040 Airframe Assembly and Rigging	2
AVMT 2050 Airframe Inspection	4
AVMT 2060 Airframe Hydraulic and Pneumatic Systems	2
AVMT 2070 Aircraft Landing Gear Systems	3
AVMT 2080 Aircraft Environmental Control Systems	3
AVMT 2085 Aircraft Fuel and Instrument Systems	3
AVMT 2090 Aircraft Electrical Systems	4
AVMT 2095 Aircraft Communication and Navigation Systems	2

#### *Powerplant (the following courses are FAA approved)*

AVMT 2210 Reciprocating Engine Powerplants I	3
AVMT 2220 Reciprocating Engine Powerplants II	4
AVMT 2230 Gas Turbine Powerplants I	3
AVMT 2240 Gas Turbine Powerplants II	3
AVMT 2260 Aircraft Engine Fuel and Fuel Metering Systems	4
AVMT 2270 Powerplant Instruments, Fire Protection and Electrical Systems	3
AVMT 2275 Powerplant Ignition and Starting Systems	4
AVMT 2280 Aircraft Powerplant Accessory Systems	3
AVMT 2285 Aircraft Propeller Systems	3
<b>Total Hours</b>	<b>99</b>

### AVIATION MAINTENANCE TECHNICIAN – AIRFRAME (AMT1)

Technical Certificate of Credit

Prepares students for employment in the field of aviation maintenance. The program emphasizes a combination of aircraft airframe maintenance theory and practical application. Satisfactory completion of all AMT program courses entitles students to participate in FAA airframe examinations and certifications. CGTC is a FAA Part 147 Certificated School.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AMT1](http://www.centralgatech.edu/gainfulemployment/AMT1)

#### *General (the following courses are FAA approved)*

AVMT 1000 Aviation Mathematics	2
AVMT 1010 Aircraft Maintenance Regulations	2
AVMT 1020 Aircraft Applied Sciences I	5
AVMT 1025 Aircraft Applied Sciences II	4
AVMT 1030 Aircraft Electricity and Electronics	5
AVMT 1210 Aviation Physics	2

#### *Airframe (the following courses are FAA approved)*

AVMT 2010 Aircraft Airframe Structures	2
or AVMT 2011 Aircraft Wood Structures, Coverings and Finishes	(1)
AVMT 2020 Airframe Sheet Metal	2
AVMT 2025 Airframe Non-Metallic Structure	2
AVMT 2030 Airframe Welding	1
AVMT 2040 Airframe Assembly and Rigging	2
AVMT 2050 Airframe Inspection	4
AVMT 2060 Airframe Hydraulic and Pneumatic Systems	2

AVMT 2070	Aircraft Landing Gear Systems	3
AVMT 2080	Aircraft Environmental Control Systems	3
AVMT 2085	Aircraft Fuel and Instrument Systems	3
AVMT 2090	Aircraft Electrical Systems	4
AVMT 2095	Aircraft Communication and Navigation Systems	2
<b>Total Hours</b>		<b>49</b>

### AVIATION MAINTENANCE TECHNICIAN – POWERPLANT (AM61)

Technical Certificate of Credit

Prepares students for employment in the field of aviation maintenance. The program emphasizes a combination of aircraft power plant maintenance theory and practical application. Satisfactory completion of all AMT program courses entitles students to participate in the FAA power plant examinations and certifications. CGTC is a FAA Part 147 Certificated School.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AM61](http://www.centralgatech.edu/gainfulemployment/AM61)

	<b>Credit Hours</b>
<i>General (the following courses are FAA approved)</i>	
AVMT 1000	2
AVMT 1010	2
AVMT 1020	5
AVMT 1025	4
AVMT 1030	5
AVMT 1210	2
<i>Powerplant (the following courses are FAA approved)</i>	
AVMT 2210	3
AVMT 2220	4
AVMT 2230	3
AVMT 2240	3
AVMT 2260	4
AVMT 2270	3
AVMT 2275	4
AVMT 2280	3
AVMT 2285	3
<b>Total Hours 50</b>	

# CABINETMAKING

## CABINETMAKING (CA13)

Associate Degree

Prepares students for careers in cabinetmaking and related fields. The program emphasizes a combination of theory and practical application necessary for successful employment.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Program-Specific Core Requirements</b>	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	
<b>45</b>	
COFC 1011 Overview of Building Construction Practices and Materials	3
and COFC 1020 Professional Tool Use and Safety - OR	3
COFC 1080 Construction Trades Core	(4)
and COFC 1030 Materials and Fasteners	(2)
COFC 1050 Construction Print Reading Fundamentals	3
CABT 1080 Cabinet Design and Layout	3
CABT 1110 Wood Joints and Fastening Methods	5
CABT 1114 Cabinet Components	3
CABT 1116 Cabinet Assembly I	5
CABT 1117 Cabinet Assembly II	5
CABT 1118 Door, Drawer, and Hardware Installation	2
CABT 1120 Laminates and Veneers	2
CABT 1122 Cabinet Finishing and Installation	3
<i>Choose a minimum of 3 hours from:</i>	
CABT 1340 CNC Woodworking I	3
CABT 1350 CNC Woodworking II	3
CABT 1360 European 32mm Construction	3
CABT 1370 Shop Management	2
CABT 1380 Furniture Fabrication	2
CABT 2300 Cabinetmaking Internship/Practicum	5
XXXX xxxx Occupationally-Related Elective(s)	5
<b>Occupationally-Related Electives:</b>	
CIST 1101 Working with Microsoft Windows	3
COMP 1000 Introduction to Computer Literacy	3
CABT 1360 European 32mm Construction	3
CABT 1370 Shop Management	2
CABT 1380 Furniture Fabrication	2
<b>Minimum Total Hours 60</b>	

## CABINETMAKING (CA12)

Diploma

Prepares students for careers in cabinetmaking and related fields. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of cabinetmaking theory and practical application necessary for successful employment. Program graduates have the qualification of cabinetmaker.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CA12](http://www.centralgatech.edu/gainfulemployment/CA12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	
<b>45</b>	
COFC 1011 Overview of Building Construction Practices and Materials	3
and COFC 1020 Professional Tool Use and Safety - OR	3
COFC 1080 Construction Trades Core	(4)
and COFC 1030 Materials and Fasteners	(2)
COFC 1050 Construction Print Reading Fundamentals	3
CABT 1080 Cabinet Design and Layout	3
CABT 1110 Wood Joints and Fastening Methods	5
CABT 1114 Cabinet Components	3
CABT 1116 Cabinet Assembly I	5
CABT 1117 Cabinet Assembly II	5
CABT 1118 Door, Drawer, and Hardware Installation	2
CABT 1120 Laminates and Veneers	2
CABT 1122 Cabinet Finishing and Installation	3
<i>Choose a minimum of five hours from:</i>	
CABT 1340 CNC Woodworking I	3
CABT 1350 CNC Woodworking II	3
CABT 1360 European 32mm Construction	3
CABT 1370 Shop Management	2
CABT 1380 Furniture Fabrication	2
CABT 2300 Cabinetmaking Internship/Practicum	5
XXXX xxxx Occupationally-Related Elective(s)	3
<b>Occupationally-Related Electives:</b>	
CIST 1101 Working with Microsoft Windows	3
COMP 1000 Introduction to Computer Literacy	3
<b>Total Hours 53</b>	

**CABINETMAKING ASSEMBLY TECHNICIAN (CA11)**

Technical Certificate of Credit

Prepares individuals for employment as cabinetmaking assemblers and installers. Program completers are trained in the use of hand and power tools, cabinet design and layout, wood joints and fastening methods, and cutting cabinet components.

**Conditional Program Admission:** Student must complete the Certified Construction Worker TCC or have sufficient in-field experience to enroll in this program.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | GDC

		<b>Credit Hours</b>
CABT 1080	Cabinet Design and Layout	3
CABT 1110	Wood Joints and Fastening Methods	5
CABT 1114	Cabinet Components	3
	<b>Total Hours</b>	<b>11</b>

# CARPENTRY

## CARPENTRY (CT33)

Associate Degree

Prepares students for careers in the carpentry industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates have the qualifications of an entry-level residential carpenter or entry-level commercial carpenter.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 Advanced Carpentry Procedures	5
CARP 1055 Advanced Residential Carpentry	5
or CARP 1056 Advanced Commercial Carpentry	(5)
XXXX xxxx Occupationally-Related Elective(s)	18
<b>Occupationally-Related Electives:</b>	
ACCT 1100 Financial Accounting I	4
ACCT 1125 Individual Tax Accounting	3
ACCT 2140 Legal Environment of Business	3
ACCT 2145 Personal Finance	3
BUSN 1100 Introduction to Keyboarding	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
CABT 1080 Cabinet Design and Layout	3
CABT 1110 Wood Joints and Fastening Methods	5
CMTT 2020 Construction Drafting I	3
CMTT 2050 Residential Code Review	3
COMP 1000 Introduction to Computer Literacy	3
DFTG 1127 Architectural 3D Modeling	4
ECON 1101 Principles of Economics	3
MGMT 1100 Principles of Management	3
MGMT 1105 Organizational Behavior	3
MGMT 1115 Leadership	3

MGMT 1120 Introduction to Business	3
MGMT 2150 Small Business Management	3
MGMT 2210 Project Management	3
<b>Minimum Total Hours</b>	<b>60</b>

## CARPENTRY (CT22)

Diploma

Prepares students for careers in the carpentry industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates have the qualifications of an entry-level residential carpenter or entry-level commercial carpenter.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CT22](http://www.centralgatech.edu/gainfulemployment/CT22)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>30</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 Advanced Carpentry Procedures	5
CARP 1055 Advanced Residential Carpentry	5
or CARP 1056 Advanced Commercial Carpentry	5
XXXX xxxx Occupationally-Related Elective(s)	3
<b>Occupationally-Related Electives:</b>	
ACCT 1100 Financial Accounting I	4
ACCT 1125 Individual Tax Accounting	3
ACCT 2140 Legal Environment of Business	3
ACCT 2145 Personal Finance	3
BUSN 1100 Introduction to Keyboarding	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
CABT 1080 Cabinet Design and Layout	3
CABT 1110 Wood Joints and Fastening Methods	5
CMTT 2020 Construction Drafting I	3
CMTT 2050 Residential Code Review	3
COMP 1000 Introduction to Computer Literacy	3
DFTG 1127 Architectural 3D Modeling	4
ECON 1101 Principles of Economics	3
MGMT 1100 Principles of Management	3
MGMT 1105 Organizational Behavior	3
MGMT 1115 Leadership	3
MGMT 1120 Introduction to Business	3
MGMT 2150 Small Business Management	3
MGMT 2210 Project Management	3
<b>Minimum Total Hours</b>	<b>38</b>

**ADVANCED CARPENTRY (AB71)**

Technical Certificate of Credit  
Effective Spring 2018 (201814)

Continuing where the carpentry fundamentals certificate ends, this program introduces the student to the more technically advanced carpentry skills. Topics include introduction to the interior finishes and trim, door and window installation, steel framing, and stair finishes. The program emphasizes a combination of carpentry theory and practical application necessary for successful employment. Program graduates have the qualifications of an entry-level finish carpenter. The program uses National Center for Construction Education and Research (NCCER) curriculum which delivers standardized training and credentialing for the industry.

**Conditional Program Admission:** Student must be a graduate of the Carpentry Fundamentals (CF21) program or obtain advisor approval to enroll in this program.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:**  
**Semester(s) Offered:**  
**Location(s) Offered:** Macon

	<b>Credit Hours</b>
COFC 1080 Construction Trades Core	4
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 Advanced Carpentry Procedures	5
CARP 1055 Advanced Residential Carpentry	5
or CARP 1056 Advanced Commercial Carpentry	(5)
<b>Minimum Total Hours</b>	<b>18</b>

**CARPENTRY FUNDAMENTALS (CF21)**

Technical Certificate of Credit

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 have the qualifications of an entry-level framing carpenter. The program uses National Center for Construction Education and Research (NCCER) curriculum, which delivers standardized training and credentialing for the industry.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:**  
**Semester(s) Offered:**  
**Location(s) Offered:** Macon

	<b>Credit Hours</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
<b>Total Hours</b>	<b>17</b>

**CARPENTRY TECHNOLOGY (CT31)**

Technical Certificate of Credit

Prepares students for careers in the carpentry industry. Topics include all basic carpentry skills necessary for successful employment. Program graduates have the qualifications of an entry-level residential carpenter or entry-level commercial carpenter. The program uses National Center for Construction Education and Research (NCCER) curriculum, which delivers standardized training and credentialing for the industry.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:**  
**Semester(s) Offered:**  
**Location(s) Offered:** Macon

	<b>Credit Hours</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 Advanced Carpentry Procedures	5
CARP 1055 Advanced Residential Carpentry	5
or CARP 1056 Advanced Commercial Carpentry	5
<b>Total Hours</b>	<b>27</b>

**CERTIFIED CONSTRUCTION WORKER (CCW1)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age**  
**Dual Enrollment:** 9th - 12th grade in high school  
**GDC:** None  
**Semester(s) Offered:** Fall | Spring | Summer (GDC)  
**Location(s) Offered:** Dual Enrollment | GDC

	<b>Credit Hours</b>
COFC 1011 Overview of Building Construction Practices and Materials	3
and COFC 1020 Professional Tool Use and Safety - OR	3
COFC 1080 Construction Trades Core	(4)
and COFC 1030 Materials and Fasteners	(2)
COFC 1050 Construction Print Reading Fundamentals	3
<b>Minimum Total Hours</b>	<b>9</b>



# CONSTRUCTION MANAGEMENT TECHNOLOGY

## CONSTRUCTION MANAGEMENT TECHNOLOGY (CMT3)

Associate Degree

Designed for students who want to work in some aspect of construction supervision as a foreman, project manager, carpenter foreman, lead carpenter and other positions with in the construction field. Students will be able to print read, develop hands on carpentry skills, and develop accounting, supervision and management skills after completion of the program. The program uses National Center for Construction Education and Research (NCCER) curriculum which delivers standardized training and credentialing for the industry.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>22</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 IAdvanced Carpentry Procedures	5
<i>Residential Specialization (8R23)</i>	
CARP 1055 Advanced Residential Carpentry	5
CMTT 2010 Residential Estimating Review	3
CMTT 2020 Construction Drafting I	3
or DFTG 1101 CAD Fundamentals	(4)
CMTT 2050 Residential Code Review	3
CMTT 2130 Computerized Construction Scheduling	3
ACCT 2140 Legal Environment of Business	3
or CMTT 2170 Construction Contracting	(3)
XXXX xxxx Occupationally-Related Elective(s)	3
<b>Occupationally-Related Electives:</b>	
ACCT 1100 Financial Accounting I	4
ACCT 1125 Individual Tax Accounting	3
ACCT 2140 Legal Environment of Business	3
ACCT 2145 Personal Finance	3
BUSN 1100 Introduction to Keyboarding	3
BUSN 1330 Personal Effectiveness	3

BUSN 1340	Customer Service Effectiveness	3
CABT 1080	Cabinet Design and Layout	3
CABT 1110	Wood Joints and Fastening Methods	5
CMTT 2020	Construction Drafting I	3
CMTT 2050	Residential Code Review	3
COMP 1000	Introduction to Computer Literacy	3
DFTG 1127	Architectural 3D Modeling	4
ECON 1101	Principles of Economics	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 2150	Small Business Management	3
MGMT 2210	Project Management	3
<b>Minimum Total Hours</b>		<b>60</b>

## CONSTRUCTION MANAGEMENT TECHNOLOGY (CM22)

Diploma

Designed for students who want to work in some aspect of construction supervision as a foreman, project manager, carpenter foreman, lead carpenter and other positions with in the construction field. Students will be able to print read, develop hands on carpentry skills, and develop accounting, supervision and management skills after completion of the program. The program uses National Center for Construction Education and Research (NCCER) curriculum which delivers standardized training and credentialing for the industry.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	3
or MATH 1111 College Algebra	3
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>26</b>
COFC 1080 Construction Trades Core	4
CARP 1000 Fundamental Carpentry Skills	4
CARP 1015 Structural Framing	5
CARP 1025 Intermediate Carpentry Techniques	4
CARP 1035 Advanced Carpentry Procedures	5
<i>Residential Specialization (8R32)</i>	
CARP 1055 Advanced Residential Carpentry	5
CMTT 2010 Residential Estimating Review	3
CMTT 2020 Construction Drafting I	3
or DFTG 1101 CAD Fundamentals	(4)
CMTT 2050 Residential Code Review	3
CMTT 2130 Computerized Construction Scheduling	3
ACCT 2140 Legal Environment of Business	3

or CMTT 2170 Construction Contracting (3)  
 XXXX xxxx Occupationally-Related Elective(s) 3

***Occupationally-Related Electives:***

ACCT 1100	Financial Accounting I	4
ACCT 1125	Individual Tax Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
BUSN 1100	Introduction to Keyboarding	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
CABT 1080	Cabinet Design and Layout	3
CABT 1110	Wood Joints and Fastening Methods	5
CMTT 2020	Construction Drafting I	3
CMTT 2050	Residential Code Review	3
COMP 1000	Introduction to Computer Literacy	3
DFTG 1127	Architectural 3D Modeling	4
ECON 1101	Principles of Economics	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 2150	Small Business Management	3
MGMT 2210	Project Management	3

**Minimum Total Hours 53**

## COMMERCIAL TRUCK DRIVING

Conditions for Admission: Prospective students should be advised that the FMCSA regulates commercial driver licensing and requires a DOT physical and drug test and a satisfactory MVR prior to the issuance of a commercial drivers license or learners permit, which is required prior to beginning in-the-truck training. Further, random drug testing is required during the course of the Commercial Driving program.

### COMMERCIAL STRAIGHT TRUCK AND PASSENGER DRIVING (CSQ1)

Technical Certificate of Credit

Designed to address the needs of the trucking industry in Georgia. It provides basic training in the principles and skills of commercial straight truck and passenger driving operations. Through this program, students will obtain the necessary knowledge, skills, and attitudes to enable them to become a safe, skilled, professional, class B commercial truck driver. It teaches them to operate commercial straight trucks and passenger vehicles of all different sizes and descriptions on all types of roads. The program prepares students for the Georgia CDL Skills Exam.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Peach

		Credit Hours
CTDL 1010	Fundamentals of Commercial Truck Driving	3
DENA 1050	Straight Truck/Passenger Vehicle Basic Operation	2
CTDL 1060	Straight Truck/Passenger Vehicle Advanced Operation	4
<b>Total Hours</b>		<b>9</b>

### COMMERCIAL TRUCK DRIVING (CT61)

Technical Certificate of Credit

Provides basic training in the principles and skills of commercial truck operations. 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. At the completion of the program, the student is administered the Georgia CDL Skills Exam. Program entrance requirements are included in the *Commercial Truck Driving Programs* booklet.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Hawkinsville | Peach | Putnam | VECTR

		Credit Hours
CTDL 1010	Fundamentals of Commercial Truck Driving	3
CTDL 1020	Combination Vehicle Basic Operation and Range Work	2
CTDL 1030	Combination Vehicle Advanced Operations	4
<b>Total Hours</b>		<b>9</b>

# DIESEL ENGINE TECHNOLOGY

## DIESEL TRUCK MAINTENANCE TECHNICIAN (DTM1)

Technical Certificate of Credit

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.

### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Peach | GDC

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/DTM1](http://www.centralgatech.edu/gainfulemployment/DTM1)

		Credit Hours
DIET 1000	Introduction to Diesel Technology, Tools, and Safety	3
DIET 1010	Diesel Electrical and Electronic Systems	7
DIET 1020	Preventative Maintenance	5
DIET 2010	Truck Brake Systems	4
DIET 2020	Truck Drive Trains	4
	<b>Total Hours</b>	<b>23</b>

# DRAFTING

## DRAFTING TECHNOLOGY (DT13)

Associate Degree

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.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall Semester
<b>Location(s) Offered:</b>	Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
MATH 1112 College Trigonometry or MATH 1113 Precalculus	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Courses</b>	<b>8</b>
DFTG 1101 CAD Fundamentals	4
DFTG 1103 Multiview/Basic Dimensioning	4
<b>Complete one specialization:</b>	
<i>Mechanical Drafting Specialization (8MD3)</i>	
DFTG 1105 3D Mechanical Modeling	4
DFTG 1107 Advanced Dimensioning/Sectional Views	4
DFTG 1109 Auxiliary Views/Surface Development	4
DFTG 1111 Fasteners	4
DFTG 1113 Assembly Drawings	4
DFTG 2110 Blueprint Reading for Technical Drawing I	2
DFTG 2210 Blueprint Reading for Technical Drawing II	2
XXXX xxxx Guided electives for specialization	13
<b>Guided Electives:</b>	
DFTG 1125 Architectural Fundamentals	4
DFTG 2040 Advanced 3D Modeling Mechanical	4
COMP 1000 Introduction to Computer Literacy	3
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
ASTT 1010 Basic Blueprint Reading	4
MCHT 1012 Blueprint for Machine Tool	3
AMCA 2130 CNC Mill Manual Programming	5
AMCA 2150 CNC Lathe Manual Programming	5

AMCA 2190 CAD/CAM Programming	4
COFC 1011 Overview of Building Construction Practices and Materials	3
COFC 1030 Materials and Fasteners	2
IDSY 1110 Industrial Motor Controls I	4
IDSY 1220 Intermediate Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1180 Magnetic Starters and Braking	3
IDSY 1190 Fluid Power Systems	5
BUSN 1100 Introduction to Keyboarding	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 2200 Office Accounting	4
MGMT 1110 Employment Rules and Regulations	3
MGMT 1120 Introduction to Business	3
MGMT 1125 Business Ethics	3
MGMT 1135 Managerial Accounting and Finance	3
<i>Architectural Drafting Specialization (8AD3)</i>	
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
XXXX xxxx Guided electives for specialization	14
<b>Guided Electives:</b>	
DFTG 1107 Advanced Dimensioning/Sectional Views	4
DFTG 1111 Fasteners	4
COMP 1000 Introduction to Computer Literacy	3
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
ASTT 1010 Basic Blueprint Reading	4
MCHT 1012 Blueprint for Machine Tool	3
AMCA 2130 CNC Mill Manual Programming	5
AMCA 2150 CNC Lathe Manual Programming	5
AMCA 2190 CAD/CAM Programming	4
COFC 1011 Overview of Building Construction Practices and Materials	3
COFC 1030 Materials and Fasteners	2
IDSY 1110 Industrial Motor Controls I	4
IDSY 1220 Intermediate Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1180 Magnetic Starters and Braking	3
IDSY 1190 Fluid Power Systems	5
BUSN 1100 Introduction to Keyboarding	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 2200 Office Accounting	4
MGMT 1110 Employment Rules and Regulations	3
MGMT 1120 Introduction to Business	3
MGMT 1125 Business Ethics	3
MGMT 1135 Managerial Accounting and Finance	3
<b>Total Hours</b>	<b>60</b>

**DRAFTING TECHNOLOGY (DT12)**

Diploma

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.

**Education Requirements****Admission:** High school diploma or GED®**Graduation:** High school diploma or GED®**Placement Scores:** Standard**Minimum Age:** 16**Semester(s) Offered:** Fall**Location(s) Offered:** Macon**Gainful Employment:**

www.centralgatech.edu/gainfulemployment/DT12

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1013 Algebraic Concepts	(3)
or ATH 1111 College Algebra	(3)
<b>Occupational Courses</b>	<b>11</b>
DFTG 1015 Practical Mathematics for Drafting Technology	3
or MATH 1015 Geometry and Trigonometry	(3)
DFTG 1101 CAD Fundamentals	4
DFTG 1103 Multiview/Basic Dimensioning	4
<b>Complete one specialization:</b>	
<i>Mechanical Drafting Specialization (8M32)</i>	27
DFTG 1105 3D Mechanical Modeling	4
DFTG 1107 Advanced Dimensioning/Sectional Views	4
DFTG 1109 Auxiliary Views/Surface Development	4
DFTG 1111 Fasteners	4
DFTG 1113 Assembly Drawings	4
XXXX xxxx Guided electives for specialization	4
<b>Guided Electives:</b>	
DFTG 1125 Architectural Fundamentals	4
DFTG 2040 Advanced 3D Modeling Mechanical	4
COMP 1000 Introduction to Computer Literacy	3
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
ASTT 1010 Basic Blueprint Reading	4
MCHT 1012 Blueprint for Machine Tool	3
AMCA 2130 CNC Mill Manual Programming	5
AMCA 2150 CNC Lathe Manual Programming	5
AMCA 2190 CAD/CAM Programming	4
COFC 1011 Overview of Building Construction Practices and Materials	3
COFC 1030 Materials and Fasteners	2
IDSY 1110 Industrial Motor Controls I	4
IDSY 1220 Intermediate Industrial PLCs	4

IDSY 1130 Industrial Wiring	4
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1180 Magnetic Starters and Braking	3
IDSY 1190 Fluid Power Systems	5
BUSN 1100 Introduction to Keyboarding	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 2200 Office Accounting	4
MGMT 1110 Employment Rules and Regulations	3
MGMT 1120 Introduction to Business	3
MGMT 1125 Business Ethics	3
MGMT 1135 Managerial Accounting and Finance	3

<i>Architectural Drafting Specialization (8AD2)</i>	27
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
XXXX xxxx Guided electives for specialization	4

**Guided Electives:**

DFTG 1107 Advanced Dimensioning/Sectional Views	4
DFTG 1111 Fasteners	4
COMP 1000 Introduction to Computer Literacy	3
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
ASTT 1010 Basic Blueprint Reading	4
MCHT 1012 Blueprint for Machine Tool	3
AMCA 2130 CNC Mill Manual Programming	5
AMCA 2150 CNC Lathe Manual Programming	5
AMCA 2190 CAD/CAM Programming	4
COFC 1011 Overview of Building Construction Practices and Materials	3
COFC 1030 Materials and Fasteners	2
IDSY 1110 Industrial Motor Controls I	4
IDSY 1220 Intermediate Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1180 Magnetic Starters and Braking	3
IDSY 1190 Fluid Power Systems	5
BUSN 1100 Introduction to Keyboarding	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 2200 Office Accounting	4
MGMT 1110 Employment Rules and Regulations	3
MGMT 1120 Introduction to Business	3
MGMT 1125 Business Ethics	3
MGMT 1135 Managerial Accounting and Finance	3

**Minimum Total Hours 46**

## ADVANCED CAD TECHNICIAN (AC51)

Technical Certificate of Credit

Endows students with the prospect to continue 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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AC51](http://www.centralgatech.edu/gainfulemployment/AC51)

		Credit Hours
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
XXXX xxxx	Guided Elective (any trade, tech, BUSN, CIST, IDSY, or MGMT course)	3

### Complete one specialization:

<i>Mechanical Drafting Specialization (8MD1)</i>		20
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Sectional Views	4
DFTG 1109	Auxiliary Views/Surface Development	4
DFTG 1111	Fasteners	4
DFTG 1113	Assembly Drawings	4

<i>Architectural Drafting Specialization (8AD1)</i>		20
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

**Minimum Total Hours 31**

## CAD OPERATOR (CP41)

Technical Certificate of Credit

Endows students with the prospect to continue 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. This program could also serve as an exit point for high school dual enrolled students needing a point of exit for employment purposes.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CP41](http://www.centralgatech.edu/gainfulemployment/CP41)

		Credit Hours
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4

### Complete one specialization:

<i>Mechanical Drafting Specialization (8M11)</i>		12
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Advanced Dimensioning/Sectional Views	4
DFTG 1109	Auxiliary Views/Surface Development	4

<i>Architectural Drafting Specialization (8A11)</i>		12
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4

**Minimum Total Hours 20**

**DRAFTER'S ASSISTANT (DA31)**

Technical Certificate of Credit

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. All of the courses included in the drafter's assistant program are embedded in either the drafting technology diploma or degree programs. This program could also serve as an exit point for high school dual enrolled students needing a point of exit for employment purposes.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

		<b>Credit Hours</b>
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Multiview/Basic Dimensioning	4
XXXX xxxx	Occupationally-Related Elective(s)	3
<b>Occupationally-Related Electives:</b>		
DFTG 1107	Advanced Dimensioning/Sectional Views	4
DFTG 1111	Fasteners	4
DFTG 1125	Architectural Fundamentals	4
COMP 1000	Introduction to Computer Literacy	3
GIFS 1101	Introduction to Geographic Information Systems	4
GIFS 1103	Intermediate GIS	4
CIST 1001	Computer Concepts	4
CIST 1101	Working with Microsoft Windows	3
CIST 1130	Operating Systems Concepts	3
ASTT 1010	Basic Blueprint Reading	4
MCHT 1012	Blueprint for Machine Tool	3
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2190	CAD/CAM Programming	4
COFC 1011	Overview of Building Construction Practices and Materials	3
COFC 1030	Materials and Fasteners	2
IDSY 1110	Industrial Motor Controls I	4
IDSY 1220	Intermediate Industrial PLCs	4
IDSY 1130	Industrial Wiring	4
IDSY 1160	Mechanical Laws and Principles	4
IDSY 1180	Magnetic Starters and Braking	3
IDSY 1190	Fluid Power Systems	5
BUSN 1100	Introduction to Keyboarding	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1320	Business Interaction Skills	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
BUSN 2200	Office Accounting	4
MGMT 1110	Employment Rules and Regulations	3
MGMT 1120	Introduction to Business	3
MGMT 1125	Business Ethics	3
MGMT 1135	Managerial Accounting and Finance	3
<b>Minimum Total Hours</b>		<b>11</b>



# ELECTRICAL SYSTEMS TECHNOLOGY

## ELECTRICAL SYSTEMS CONSTRUCTION AND MAINTENANCE (ES22)

Diploma

Provides instruction in the inspection, maintenance, installation, and repair of electrical systems in residential, commercial, and industrial environments. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ES22](http://www.centralgatech.edu/gainfulemployment/ES22)

### General Education Core Courses

	<b>Credit Hours</b>
<b>EMPL 1000</b> Interpersonal Relations and Professional Development	<b>2</b>
<b>ENGL 1010</b> Fundamentals of English I	<b>3</b>
<b>MATH 1012</b> Foundations of Mathematics	<b>3</b>

### Occupational Courses

<b>COFC 1080</b> Construction Trades Core	<b>4</b>
<b>ELTR 1000</b> Fundamental Electrical Concepts	<b>4</b>
<b>ELTR 1015</b> Intermediate Electrical Concepts I	<b>4</b>
<b>ELTR 1025</b> Intermediate Electrical Concepts II	<b>4</b>
<b>ELTR 1035</b> Advanced Electrical Concepts I	<b>4</b>
<b>ELTR 1055</b> Advanced Electrical Concepts II	<b>4</b>
<b>ELTR xxxx</b> Occupationally-Related Elective(s)	<b>12</b>

### Occupationally-Related Electives:

<b>ELTR 1010</b> Direct Current Fundamentals	<b>3</b>
<b>ELTR 1020</b> Alternating Current Fundamentals	<b>3</b>
<b>ELTR 1030</b> Electrical Systems Basics II	<b>7</b>
<b>ELTR 1060</b> Electrical Prints, Schematics and Symbols	<b>2</b>
<b>ELTR 1065</b> Specialty Electrical Concepts I	<b>4</b>
<b>ELTR 1075</b> Specialty Electrical Concepts II	<b>4</b>
<b>ELTR 1090</b> Commercial Writing I	<b>5</b>
<b>ELTR 1110</b> Electric Motors	<b>4</b>
<b>ELTR 1120</b> Variable Speed/Low Voltage Controls	<b>2</b>
<b>ELTR 1180</b> Electrical Controls	<b>4</b>
<b>ELTR 1205</b> Residential Writing I	<b>3</b>
<b>ELTR 1210</b> Residential Writing II	<b>3</b>
<b>ELTR 1220</b> Industrial PLCs	<b>4</b>
<b>ELTR 1250</b> Diagnostic Troubleshooting	<b>2</b>
<b>ELTR 1260</b> Transformers	<b>3</b>
<b>ELTR 1270</b> National Electric Code Industrial Applications	<b>4</b>
<b>ELTR 1510</b> Electrical Systems Technology Internship	<b>3</b>
<b>ELTR 1520</b> Grounding and Bonding	<b>2</b>
<b>ELTR 1525</b> Photovoltaic Systems	<b>5</b>
<b>ELTR 1530</b> Conduit Sizing	<b>2</b>
<b>ELTR 1540</b> Wire Pulling and Codes	<b>3</b>
<b>Total Hours</b>	<b>44</b>

## BASIC ELECTRICAL SYSTEMS TECHNICIAN (BES1)

Technical Certificate of Credit

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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

		<b>Credit Hours</b>
<b>COFC 1080</b>	Construction Trades Core	<b>4</b>
<b>ELTR 1000</b>	Fundamental Electrical Concepts	<b>4</b>
<b>ELTR 1015</b>	Intermediate Electrical Concepts I	<b>4</b>
<b>Total Hours</b>		<b>12</b>

## INTERMEDIATE ELECTRICAL SYSTEMS TECHNICIAN (IE61)

Technical Certificate of Credit

Serves as 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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

		<b>Credit Hours</b>
<b>ELTR 1025</b>	Intermediate Electrical Concepts II	<b>4</b>
<b>ELTR 1035</b>	Advanced Electrical Concepts I	<b>4</b>
<b>ELTR 1055</b>	Advanced Electrical Concepts II	<b>4</b>
<b>Total Hours</b>		<b>12</b>

**SPECIALITY ELECTRICAL SERVICES (SE11)**

Technical Certificate of Credit

Introduces the student to special situations found in the electrical construction industry. Topics include specialty load calculations, health care facilities, fire alarms, transformers, advanced controls, HVAC controls, and motor operation and maintenance.

**Education Requirements****Admission:** High school diploma or GED®**Graduation:** High school diploma or GED®**Placement Scores:** Standard**Minimum Age:** 16**Semester(s) Offered:** Fall | Spring | Summer**Location(s) Offered:** Macon**Gainful Employment:**[www.centralgatech.edu/gainfulemployment/SE11](http://www.centralgatech.edu/gainfulemployment/SE11)

		<b>Credit Hours</b>
COFC 1080	Construction Trades Core	4
ELTR 1000	Fundamental Electrical Concepts	4
ELTR 1065	Specialty Electrical Concepts I	4
ELTR 1075	Specialty Electrical Concepts II	4
	<b>Minimum Total Hours</b>	<b>16</b>

# ELECTRONICS TECHNOLOGY

## ELECTRONICS TECHNOLOGY (ET13)

Associate Degree

Prepares 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 technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates are qualified as electronics technicians with a specialization in biomedical instrumentation or a direction towards a field of occupation found within electronics.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
MATH 1112 College Trigonometry or MATH 1113 Precalculus	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Courses</b>	<b>30</b>
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 and Microprocessor Fundamentals	5
ELCR 1060 Linear Integrated Circuits	3
<b>Complete one specialization:</b>	
<i>Biomedical Instrumentation Technology Specialization (8BI3)</i>	
ALHS 1010 Introduction to Anatomy and Physiology or ALHS 1011 Structure and Function of the Human Body	(5)
ALHS 1090 Medical Terminology for AHS	2
BMET 1231 Medical Equipment Function and Operation I	4
BMET 2242 Medical Equipment Function and Operation II	4
BMET 2343 Internship Medical Systems	3
<i>Communication Electronics Specialization (8CE3)</i>	
ELCR 2210 Analog Communications	5
ELCR 2220 Digital Communications	3
ELCR 2230 Antenna and Transmission Lines	3
ELCR 2240 Microwave Communication and Radar	3
ELCR 2250 Optical Communication Techniques	3

<i>Field Occupation Specialization (8F13)</i>	16
Choose 16 hours from:	
ASTT 1010 Basic Blueprint Reading	4
ASTT 1050 Aerospace Quality Management	3
BUSN 1100 Introduction to Keyboarding	3
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
CIST 1305 Program Design and Development	3
CIST 1401 Computer Networking Fundamentals	4
CIST 1601 Information Security Fundamentals	3
CIST 2451 Cisco Network Fundamentals	4
DFTG 1101 CAD Fundamentals	4
ELCR 2210 Analog Communications	5
ELCR 2220 Digital Communications	3
ELCR 2240 Microwave Communication and Radar	3
ELCR 2250 Optical Communication Techniques	3
ELTR 1060 Electrical Prints, Schematics and Symbols	2
ELTR 1110 Electric Motors	4
ELTR 1120 Variable Speed/Low Voltage Controls	2
ELTR 1180 Electrical Controls	4
ELTR 1250 Diagnostic Troubleshooting	2
ELTR 1270 National Electric Code Industrial Applications	4
IDFC 1007 Industrial Safety Procedures	2
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1220 Intermediate Industrial PLCs	4
METR 1101 Introduction to Quality, Standards, and ISO 9000	3
METR 1111 Introduction to Measure Standards and Technology	3
MGMT 1100 Principles of Management	3
MGMT 1120 Introduction to Business	3
MGMT 2135 Management Communications Techniques	3
MGMT 2140 Retail Management	3
SCMA 1004 Quality Improvement Concepts	3
<b>Total Hours</b>	<b>61</b>

**ELECTRONICS FUNDAMENTALS (EF12)**

Diploma

Prepares 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 are prepared for entry-level positions in the electronics field and qualified for admission to the electronics technology program.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/EF12](http://www.centralgatech.edu/gainfulemployment/EF12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1013 Algebraic Concepts	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Occupational Courses</b>	<b>30</b>
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 and Microprocessor Fundamentals	5
ELCR 1060 Linear Integrated Circuits	3
<b>Total Hours</b>	<b>38</b>

**ELECTRONICS TECHNOLOGY (ET14)**

Diploma

Prepares 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 are qualified as electronics technicians with a specialization in biomedical instrumentation or a direction towards a field of occupation found within electronics.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/ET14](http://www.centralgatech.edu/gainfulemployment/ET14)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1013 Algebraic Concepts	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Occupational Courses</b>	<b>30</b>
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 and Microprocessor Fundamentals	5
ELCR 1060 Linear Integrated Circuits	3

**Complete one specialization:**

<i>Biomedical Instrumentation Technology Specialization (8BI2)</i>	
ALHS 1010 Introduction to Anatomy and Physiology	4
or ALHS 1011 Structure and Function of the Human Body	(5)
ALHS 1090 Medical Terminology for AHS	2
BMET 1231 Medical Equipment Function and Operation I	4
BMET 2242 Medical Equipment Function and Operation II	4
BMET 2343 Internship Medical Systems	3
<i>Communication Electronics Specialization (8CE2)</i>	
ELCR 2210 Analog Communications	5
ELCR 2220 Digital Communications	3
ELCR 2230 Antenna and Transmission Lines	3
ELCR 2240 Microwave Communication and Radar	3
ELCR 2250 Optical Communication Techniques	3

*Field Occupation Specialization (8FC2)* 16

Choose 16 hours from:

ASTT 1010	Basic Blueprint Reading	4
ASTT 1050	Aerospace Quality Management	3
BUSN 1100	Introduction to Keyboarding	3
CIST 1001	Computer Concepts	4
CIST 1101	Working with Microsoft Windows	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
CIST 1601	Information Security Fundamentals	3
CIST 2451	Cisco Network Fundamentals	4
DFTG 1101	CAD Fundamentals	4
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
ELCR 2240	Microwave Communication and Radar	3
ELCR 2250	Optical Communication Techniques	3
ELTR 1060	Electrical Prints, Schematics and Symbols	2
ELTR 1110	Electric Motors	4
ELTR 1120	Variable Speed/Low Voltage Controls	2
ELTR 1180	Electrical Controls	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1270	National Electric Code Industrial Applications	4
IDFC 1007	Industrial Safety Procedures	2
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLCs	4
IDSY 1220	Intermediate Industrial PLCs	4
METR 1101	Introduction to Quality, Standards, and ISO 9000	3
METR 1111	Introduction to Measure Standards and Technology	3
MGMT 1100	Principles of Management	3
MGMT 1120	Introduction to Business	3
MGMT 2135	Management Communications Techniques	3
MGMT 2140	Retail Management	3
SCMA 1004	Quality Improvement Concepts	3
<b>Total Hours</b>		<b>54</b>

### ALTERNATIVE ENERGY FUNDAMENTALS (AE21)

Technical Certificate of Credit

Prepares 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

	<b>Credit Hours</b>	
MATH 1012	Foundations of Mathematics	3
or MATH 1013	Algebraic Concepts	3
or MATH 1111	College Algebra	3
ELCR 1010	Direct Current Circuits	6
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ALET 1390	Alternative Energy and Green Technology Systems	3
<b>Total Hours</b>		<b>24</b>

### BASIC ELECTRONIC ASSEMBLER (BE41)

Technical Certificate of Credit

Prepares 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	
<b>Location(s) Offered:</b>	Macon   Warner Robins

	<b>Credit Hours</b>	
MATH 1012	Foundations of Mathematics	3
or MATH 1013	Algebraic Concepts	(3)
or MATH 1111	College Algebra	(3)
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	6
<b>Total Hours</b>		<b>10</b>

# ENGINEERING TECHNOLOGY

## ENGINEERING TECHNOLOGY (ET33)

Associate Degree  
Prior to Summer 2018 (201816)

Provides the opportunity for students to explore a career in engineering at the professional level. Program graduates are qualified as engineering technicians with a specialization in mechanical engineering technology, electrical engineering technology, or industrial engineering technology.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>19</b>
<i>Area I - Language Arts Communication</i>	
ENGL 1101 Composition and Rhetoric	3
ENGL 1102 Literature and Composition	3
<i>Area II - Social/Behavioral Sciences</i>	
HIST 1111 World History I	3
or HIST 1112 World History II	(3)
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1113 Precalculus	3
MATH 1131 Calculus I	4
<i>Area IV - Humanities/Fine Arts</i>	
ARTS 1101 Art Appreciation	3
or ENGL 2130 American Literature	(3)
or MUSC 1101 Music Appreciation	(3)
<b>Occupational Courses</b>	<b>25</b>
ENGT 1000 Introduction to Engineering Technology	3
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
DFTG 1101 CAD Fundamentals	4
or DFTG 2010 Engineering Graphics	(4)
ENGL 1105 Workplace and Technical Communications	3
PHYS 1111 Introductory Physics I	3
PHYS 1111L Introductory Physics Lab I	1
PHYS 1112 Introductory Physics II	3
PHYS 1112L Introductory Physics Lab II	1
SPCH 1101 Public Speaking	3
<b>Complete one specialization:</b>	
<i>Electrical Engineering Technology (8E13)</i>	<b>23</b>
ECET 1101 Circuit Analysis I	4
ECET 1110 Digital Systems I	4
ECET 2101 Circuit Analysis II	4
ECET 2120 Electronic Circuits I	4
MATH 1132 Calculus II	4
XXXX xxxx Specialization Elective(s)	3
<b>Specialization Electives:</b>	
CIST 1122 Hardware Installation and Maintenance	4
CIST 1305 Program Design and Development	3
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103 Multiview/Basic Dimensioning	4

DFTG 1105 3D Mechanical Modeling	4
ECON 1101 Principles of Economics	3
ELCR 2210 Analog Communications	5
ELCR 2220 Digital Communications	3
HIST 2111 U.S. History I	3
HIST 2112 U.S. History II	3
MATH 1111 College Algebra	3
MATH 1112 College Trigonometry	3
PHSC 1111 Physical Science	3
SOCI 1101 Introduction to Sociology	3
<i>Industrial Engineering Technology (8I23)</i>	
ACCT 1100 Financial Accounting I	25
CIST 2361 C++ Programming I	4
MATH 1127 Introduction to Statistics	3
MEGT 1010 Manufacturing Processes	3
MEGT 1321 Machining and Welding	2
XXXX xxxx Specialization Department Elective	3
<b>Department Electives:</b>	
CIST 1305 Program Design and Development	3
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
ECON 1101 Principles of Economics	3
HIST 2111 U.S. History I	3
HIST 2112 U.S. History II	3
MATH 1111 College Algebra	3
PHSC 1111 Physical Science	3
SOCI 1101 Introduction to Sociology	3
XXXX xxxx Specialization Guided Electives	6
<b>Guided Electives:</b>	
CIST 1122 Hardware Installation and Maintenance	4
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103 Multiview/Basic Dimensioning	4
DFTG 1105 3D Mechanical Modeling	4
MATH 1112 College Trigonometry	3
MCHT 1011 Introduction to the Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
MCHT 1013 Machine Tool Math	3
MCHT 1020 Heat Treatment and Surface Grinding	3
WELD 1000 Introduction to Welding Technology	4
WELD 1330 Metal Welding and Cutting Techniques	2
<i>Mechanical Engineering Technology (8ME3)</i>	
CIST 2361 C++ Programming I	4
DFTG 2020 Visualization and Graphics	3
MATH 1132 Calculus II	4
MEGT 1010 Manufacturing Processes	3
MEGT 1321 Machining and Welding	2
XXXX xxxx Specialization Electives	3
<b>Specialization Electives:</b>	
CIST 1122 Hardware Installation and Maintenance	4
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103 Multiview/Basic Dimensioning	4
DFTG 1105 3D Mechanical Modeling	4
ECON 1101 Principles of Economics	3
HIST 2111 U.S. History I	3

HIST 2112	U.S. History II	3	ECET 1102	Circuit Analysis I	3
MATH 1111	College Algebra	3	ECET 1102L	Circuit Analysis I Lab	1
MATH 1112	College Trigonometry	3	ECET 1111	Digital Systems I	3
MCHT 1011	Introduction to the Machine Tool	4	ECET 1111L	Digital Systems I Lab	1
MCHT 1012	Blueprint for Machine Tool	3	ECET 2102	Circuit Analysis II	3
MCHT 1013	Machine Tool Math	3	ECET 2102L	Circuit Analysis II Lab	1
MCHT 1020	Heat Treatment and Surface Grinding	3	ECET 2121	Electronics Circuits I	3
PHSC 1111	Physical Science	3	ECET 2121L	Electronics Circuits I Lab	1
SOCI 1101	Introduction to Sociology	3	MATH 1132	Calculus II	4
WELD 1000	Introduction to Welding Technology	4	XXXX xxxx	Specialization Elective(s)	3
WELD 1330	Metal Welding and Cutting Techniques	2			
	<b>Total Hours</b>	<b>63</b>			

### ENGINEERING TECHNOLOGY (ET33)

Associate Degree

*Effective Summer 2018 (201816)*

Provides the opportunity for students to explore a career in engineering at the professional level. Program graduates are qualified as engineering technicians with a specialization in mechanical engineering technology, electrical engineering technology, or industrial engineering technology.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

#### General Education Core Courses

*Area I - Language Arts Communication*  
ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*

HIST 1111	World History I	3
or HIST 1112	World History II	(3)
or HIST 2111	U.S. History I	(3)
or HIST 2112	U.S. History II	(3)

*Area III - Natural Sciences/Mathematics*

MATH 1113	Precalculus	3
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*Area IV - Humanities/Fine Arts*

ARTS 1101	Art Appreciation	3
or MUSC 1101	Music Appreciation	(3)

*Program Specific Requirement*

MATH 1131	Calculus I	4
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#### Occupational Courses

CHEM 1211	Chemistry I	3
CHEM 1211L	Chemistry Lab I	1
DFTG 1101	CAD Fundamentals	4
or 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 Lab I	1
PHYS 1112	Introductory Physics II	3
PHYS 1112L	Introductory Physics Lab II	1
SPCH 1101	Public Speaking	3

#### Complete one specialization:

<i>Electrical Engineering Technology (8E13)</i>		23
ENGT 1000	Introduction to Engineering Technology	3

#### Specialization Electives:

CIST 1122	Hardware Installation and Maintenance	4
CIST 1305	Program Design and Development	3
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103	Multiview/Basic Dimensioning	4
DFTG 1105	3D Mechanical Modeling	4
ECON 1101	Principles of Economics	3
ELCR 2210	Analog Communications	5
ELCR 2220	Digital Communications	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
PHSC 1111	Physical Science	3
SOCI 1101	Introduction to Sociology	3

#### Industrial Engineering Technology (8I23)

ENGT 1000	Introduction to Engineering Technology	3
ACCT 1100	Financial Accounting I	4
CIST 1305	Program Design and Development	3
CIST 2341	C# Programming I	4
or CIST 2361	C++ Programming I	4
or CIST 2371	Java Programming I	4
MATH 1127	Introduction to Statistics	3
MEGT 1010	Manufacturing Processes	3
MEGT 1321	Machining and Welding	2
or LOGI 1000	Business Logistics	3
XXXX xxxx	Specialization Elective(s)	3

#### Specialization Electives:

CIST 1122	Hardware Installation and Maintenance	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103	Multiview/Basic Dimensioning	4
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MCHT 1011	Introduction to the Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1013	Machine Tool Math	3
MCHT 1020	Heat Treatment and Surface Grinding	3
WELD 1000	Introduction to Welding Technology	4
WELD 1330	Metal Welding and Cutting Techniques	2

#### Mechanical Engineering Technology (8ME3)

DFTG 2020	Visualization and Graphics	3
ENGT 1000	Introduction to Engineering Technology	3
MATH 1132	Calculus II	4

Choose 12 credit hours from the following with a minimum of two MEGT courses:

CIST 1305	Program Design and Development	3
CIST 2341	C# Programming I	4

CIST 2361	C++ Programming I	4
CIST 2371	Java Programming I	4
MEGT 1010	Manufacturing Processes	3
MEGT 1321	Machining and Welding	2
MEGT 2030	Statics	3
MEGT 2080	Strength of Materials	4
XXXX xxxx	Specialization Electives	3

**Specialization Electives:**

CIST 1122	Hardware Installation and Maintenance	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
DFTG 1103	Multiview/Basic Dimensioning	4
DFTG 1105	3D Mechanical Modeling	4
ECON 1101	Principles of Economics	3
HIST 2111	U.S. History I	3
HIST 2112	U.S. History II	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
MCHT 1011	Introduction to the Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1013	Machine Tool Math	3
MCHT 1020	Heat Treatment and Surface Grinding	3
PHSC 1111	Physical Science	3
SOCI 1101	Introduction to Sociology	3
WELD 1000	Introduction to Welding Technology	4
WELD 1330	Metal Welding and Cutting Techniques	2
<b>Minimum Total Hours</b>		<b>63</b>

**ENGINEERING TECHNICIAN (ET31)**

Technical Certificate of Credit

Provides students with basic technical skills required to enter into the engineering technology field through a short-term certificate or to continue into the associate degree program.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Credit Hours****Occupational Courses**

ENGT 1000	Introduction to Engineering Technology	3
DFTG 2010	Engineering Graphics	4
or DFTG 1101	CAD Fundamentals	(4)

**Complete one specialization:**

<i>Electrical Engineering Technology</i>	8	
ECET 1101	Circuit Analysis I	4
ECET 2101	Circuit Analysis II	4

<i>Industrial Engineering Technology</i>	7	
MEGT 1010	Manufacturing Processes	3
- AND		

Choose a minimum of four hours from:

CIST 2361	C++ Programming I	4
MEGT 1321	Machining and Welding	2
IDSY 1190	Fluid Power Systems	5

<i>Mechanical Engineering Technology</i>	7	
MEGT 1010	Manufacturing Processes	3
- AND		
Choose a minimum of four hours from:		
CIST 2361	C++ Programming I	4
MEGT 1321	Machining and Welding	2
IDSY 1190	Fluid Power Systems	5
<b>Total Hours</b>		<b>14</b>

**ENGINEERING TECHNOLOGY BASICS (EBT1)**

Technical Certificate of Credit

Provides training in core engineering techniques, including drafting and design, complex mathematical calculations, and force evaluation. Topics also include engineering project write-ups, presentation, evaluation, and safety.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**
[www.centralgatech.edu/gainfulemployment/EBT1](http://www.centralgatech.edu/gainfulemployment/EBT1)
**Credit Hours**

ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1113	Precalculus	3
ENGT 1000	Introduction to Engineering Technology	3
DFTG 1101	CAD Fundamentals	4
or DFTG 2010	Engineering Graphics	(4)
CHEM 1211	Chemistry I	3
and CHEM 1211L	Chemistry Lab I	1
- OR		
ECET 1101	Circuit Analysis I	4
- OR		
PHYS 1111	Introductory Physics I	3
and PHYS 1111L	Introductory Physics Lab I	1
<b>Total Hours</b>		<b>20</b>



# GEOGRAPHIC INFORMATION SYSTEMS

## GEOGRAPHIC INFORMATION SYSTEMS (GI13)

Associate Degree

Prepares students for employment in a variety of geographic information systems (GIS) professional positions. Students will work for organizations utilizing GIS software and global positioning systems (GPS) equipment. Graduating students will apply their education in mobile GIS, internet mapping and cartography, GIS in agricultural applications, GIS in local and county government, GPS surveying, and customizing GIS applications through programming. Professional positions in GIS may include: GIS technician, planning technician, GIS analyst, photogrammetry and remote sensing technician, natural resource management technician, data entry technician, research technician, and sales and marketing technician. 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 GIS practices and software.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall  
**Location(s) Offered:** Macon

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
GIFS 1109 Special Topics in GIS	4
GIFS 1114 Advanced GIS: Application Development	4
GIFS 1116 Spatial Analysis in GIS	4
GIFS 1122 GIS in Science, Business, and Government	4
GIFS 1124 Cartographic Design in GIS	4
GIFS 1126 Database Design and Management in GIS	4
or CIST 2129 Comprehensive Database Techniques	(4)
GIFS 2030 Geographic Information System Exit Review	2

Choose one of the following two track options:

#### Option 1

GIFS 2000 Geographic Information Systems Practicum/Internship	3
Choose eight hours from:	8
DFTG 1101 CAD Fundamentals	4

DFTG 1103 Multiview/Basic Dimensioning	4
DFTG 1105 3D Mechanical Modeling	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
COMP 1000 Introduction to Computer Literacy	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3
MKTG 2300 Marketing Management	3

#### Option 2

GIFS 2010 Geographic Information Systems Internship/Practicum	4
Choose seven hours from:	7
DFTG 1101 CAD Fundamentals	4
DFTG 1103 Multiview/Basic Dimensioning	4
DFTG 1105 3D Mechanical Modeling	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
COMP 1000 Introduction to Computer Literacy	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3
MKTG 2300 Marketing Management	3

**Total Hours 60**

## GEOGRAPHIC INFORMATION SYSTEMS (GI12)

### Diploma

Prepares students for employment in a variety of geographic information systems (GIS) professional positions. Students will work for organizations utilizing GIS software and global positioning systems (GPS) equipment. Graduating students will apply their education in mobile GIS, internet mapping and cartography, GIS in agricultural applications, GIS in local and county government, GPS surveying, and customizing GIS applications through programming. Professional positions in GIS may include: GIS technician, planning technician, GIS analyst, photogrammetry and remote sensing technician, natural resource management technician, data entry technician, research technician, and sales and marketing technician. 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 GIS practices and software.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall  
**Location(s) Offered:** Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/GI12](http://www.centralgatech.edu/gainfulemployment/GI12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I or ENGL 1101 Composition and Rhetoric	3
MATH 1012 Foundations of Mathematics or MATH 1103 Quantitative Skills and Reasoning or MATH 1101 Mathematical Modeling or MATH 1111 College Algebra	3 (3) (3) (3)
<b>Occupational Courses</b>	<b>35</b>
GIFS 1101 Introduction to Geographic Information Systems	4
GIFS 1103 Intermediate GIS	4
GIFS 1109 Special Topics in GIS	4
GIFS 1114 Advanced GIS: Application Development	4
GIFS 1116 Spatial Analysis in GIS	4
GIFS 1122 GIS In Science, Business, and Government	4
GIFS 1124 Cartographic Design for GIS	4
GIFS 1126 Database Design and Management in GIS or CIST 2129 Comprehensive Database Techniques	4 (4)
XXXX xxxx Occupationally-Related Electives(s)	3
<b>Occupationally-Related Electives:</b>	
DFTG 1101 CAD Fundamentals	4
DFTG 1103 Multiview/Basic Dimensioning	4
DFTG 1105 3D Mechanical Modeling	4
CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1130 Operating Systems Concepts	3
COMP 1000 Introduction to Computer Literacy	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3

MKTG 2300 Marketing Management

3

**Total Hours 43**

## GIS TECHNOLOGY (GT41)

Technical Certificate of Credit

Provides students with a basic knowledge of the geographic information systems (GIS) and global positioning systems (GPS). Students will learn project management and will be able to effectively use microcomputer hardware and software applications to enhance existing job skills in the GIS and GPS profession.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/GT41](http://www.centralgatech.edu/gainfulemployment/GT41)

	Credit Hours
GIFS 1101 Introduction To GIS	4
GIFS 1103 Intermediate GIS	4
GIFS 1109 Special Topics in GIS	4
GIFS 1122 GIS in Science, Business, and Government	4
<b>Total Hours</b>	<b>16</b>

# INDUSTRIAL SYSTEMS TECHNOLOGY

MCHT 1119	Lathe Operations I	3
MCHT 1120	Mill Operations I	3
WELD 1330	Metal Welding and Cutting Techniques	2
<b>Total Hours</b>		<b>63</b>

## INDUSTRIAL SYSTEMS TECHNOLOGY (IS13)

Associate Degree

Prepares students 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 degree program teaches skills in industrial systems technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, PLCs, instrumentation, fluid power, mechanical, pumps and piping, and computers. Graduates of the program are qualified for employment as industrial electricians or industrial systems technicians.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall Semester
<b>Location(s) Offered:</b>	Macon   Warner Robins

### General Education Core Courses

	Credit Hours
<b>Area I - Language Arts/Communication</b>	<b>15</b>
ENGL 1101 Composition and Rhetoric	3
<b>Area II - Social/Behavioral Sciences</b>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<b>Area III - Natural Sciences/Mathematics</b>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Area IV - Humanities/Fine Arts</b>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3

### Occupational Courses

ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1170 Industrial Mechanics	4
IDSY 1190 Fluid Power Systems	4
IDSY 1195 Pumps and Piping Systems	3
IDSY 1210 Industrial Motor Controls II	4
IDSY 1220 Intermediate Industrial PLCs	4
XXXX xxxx Occupationally-Related Electives	11

### Occupationally-Related Electives:

AIRC 1005 Refrigeration Fundamentals	4
AIRC 1010 Refrigeration Principles and Practices	4
ELCR 1005 Soldering Technology	1
IDSY 1020 Print Reading and Problem Solving	3
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1240 Maintenance for Reliability	4
IDSY 1260 Machine Tool For Industrial Repairs	4
IDSY 1310 Industrial Systems Review	3

## INSTRUMENTATION AND CONTROLS TECHNICIAN (IA13)

Associate Degree

Provides students with a basic knowledge of instrumentation and control maintenance functions such as troubleshooting, repair, and installation of instruments, control devices, and electronic equipment. Instruction is performed through a combination of theory and hands-on training.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

### General Education Core Courses

	Credit Hours
<b>Area I - Language Arts/Communication</b>	<b>16</b>
ENGL 1101 Composition and Rhetoric	3
<b>Area II - Social/Behavioral Sciences</b>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<b>Area III - Natural Sciences/Mathematics</b>	
PHYS 1110 Conceptual Physics	3
PHYS 1110L Conceptual Physics Lab	1
MATH 1101 Mathematical Modeling	3
or MATH 1111 College Algebra	(3)
<b>Area IV - Humanities/Fine Arts</b>	
HUMN 1101 Introduction to Humanities	3
or ARTS 1101 Art Appreciation	(3)

### Occupational Courses

ICET 2040 Fundamentals of Pressure, Temperature, and Flow	5
ICET 2060 Instrumentation Maintenance and Calibration	5
ICET 2080 Final Control Elements	4
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1210 Industrial Motor Controls II	4
IDSY 1230 Industrial Instrumentation	4
IDSY 2750 Human Machine Interface	4
IDSY 2800 Advanced Process Control	4
IDSY 2830 Networking Industrial Equipment	4
IDSY 2850 Industrial Graphical Communication	4
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit analysis	(3)

**Total Hours 68**

**ELECTRICAL CONTROL SYSTEMS (EC22)**

Diploma

Prepares 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 are qualified for employment as industrial electricians or industrial control technicians.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall Semester
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/EC22](http://www.centralgatech.edu/gainfulemployment/EC22)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1013 Algebraic Concepts or MATH 1012 Foundations of Mathematics	3 (3)
<b>Occupational Courses</b>	<b>36</b>
ELTR 1020 Alternating Current Fundamentals	3
IDFC 1012 Alternating Current I	(3)
IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I or IDSY 1101 DC Circuit Analysis	3 (3)
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1210 Industrial Motor Controls II	4
IDSY 1220 Intermediate Industrial PLCs	4
IDSY 1230 Industrial Instrumentation	4
XXXX xxxx Occupationally-Related Electives	6
<b>Occupationally-Related Electives:</b>	
AIRC 1005 Refrigeration Fundamentals	4
AIRC 1010 Refrigeration Principles and Practices	4
ELCR 1005 Soldering Technology	1
IDSY 1020 Print Reading and Problem Solving	3
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1240 Maintenance for Reliability	4
IDSY 1260 Machine Tool For Industrial Repairs	4
IDSY 1310 Industrial Systems Review	3
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>44</b>

**INDUSTRIAL MECHANICAL SYSTEMS (IMS2)**

Diploma

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 are qualified for employment as an industrial maintenance mechanic.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall Semester
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/IMS2](http://www.centralgatech.edu/gainfulemployment/IMS2)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics or MATH 1013 Algebraic Concepts	3 (3)
<b>Occupational Courses</b>	<b>43</b>
ELTR 1020 Alternating Current Fundamentals or IDFC 1012 Alternating Current I or IDSY 1105 AC Circuit Analysis	3 (3) (3)
IDFC 1011 Direct Current I or IDSY 1101 DC Circuit Analysis	3 (3)
IDSY 1020 Print Reading and Problem Solving	3
IDSY 1110 Industrial Motor Controls I	4
IDSY 1160 Mechanical Laws and 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
XXXX xxxx Occupationally-Related Electives	11
<b>Occupationally-Related Electives:</b>	
AIRC 1005 Refrigeration Fundamentals	4
AIRC 1010 Refrigeration Principles and Practices	4
ELCR 1005 Soldering Technology	1
IDSY 1260 Machine Tool For Industrial Repairs	4
IDSY 1310 Industrial Systems Review	3
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>51</b>

**INDUSTRIAL SYSTEMS TECHNOLOGY (IST4)**

Diploma

Prepares students 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 program teaches skills in industrial systems technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, PLCs, instrumentation, fluidpower, mechanical, pumps and piping, and computers. Graduates of the program are qualified for employment as industrial electricians or industrial systems technicians.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall Semester
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/IST4](http://www.centralgatech.edu/gainfulemployment/IST4)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1013 Algebraic Concepts	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>38</b>
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
IDSY 1170 Industrial Mechanics	4
IDSY 1190 Fluid Power Systems	4
IDSY 1195 Pumps and Piping Systems	3
XXXX xxxx Occupationally-Related Electives	9
<b>Occupationally-Related Electives:</b>	
AIRC 1005 Refrigeration Fundamentals	4
AIRC 1010 Refrigeration Principles and Practices	4
ELCR 1005 Soldering Technology	1
IDSY 1020 Print Reading and Problem Solving	3
IDSY 1160 Mechanical Laws and Principles	4
IDSY 1240 Maintenance for Reliability	4
IDSY 1260 Machine Tool For Industrial Repairs	4
IDSY 1310 Industrial Systems Review	3
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>46</b>

**ELECTRICAL MAINTENANCE TECHNICIAN (EM81)**

Technical Certificate of Credit

Provides instruction in industrial systems electrical inspection, maintenance, service, and repair. Topics include DC and AC fundamentals, motor controls, magnetic starters and braking systems, PLCs, and industrial wiring procedures.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/EM81](http://www.centralgatech.edu/gainfulemployment/EM81)

	<b>Credit Hours</b>
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1130 Industrial Wiring	4
<b>Total Hours</b>	<b>18</b>

**ELECTRO-MECHANICAL TECHNICIAN (ET71)**

Technical Certificate of Credit

Offers industrial-related mechanical and electrical training to employees with in-field work experience. This program includes instruction in safety procedures, motor controls and industrial applications of the National Electric Code, among other course work and is designed for plant maintenance personnel to enhance existing mechanical and electrical skills.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	GDC

	<b>Credit Hours</b>
IDFC 1007 Industrial Safety Procedures	2
IDSY 1130 Industrial Wiring	4
IDSY 1110 Industrial Motor Controls I	4
IDSY 1150 DC and AC Motors	3
IDSY 1190 Fluid Power Systems	4
IDSY 1195 Pumps and Piping Systems	3
IDSY 1170 Industrial Mechanics	4
IDSY 1180 Magnetic Starters and Braking	3
BFMT 1040 Building Climate Controls	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>32</b>

**INDUSTRIAL ELECTRICIAN (IE41)**

Technical Certificate of Credit

Prepares students for employment using basic electrical maintenance skills. Instruction is provided in the occupational areas of industrial safety, direct and alternating current principles, and industrial wiring.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	Credit Hours
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
IDSY 1130 Industrial Wiring	4
<b>Total Hours</b>	<b>10</b>

**INDUSTRIAL FLUID POWER TECHNICIAN (IF11)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

	Credit Hours
IDSY 1170 Industrial Mechanics	4
IDSY 1190 Fluid Power Systems	4
IDSY 1195 Pumps and Piping Systems	3
<b>Total Hours</b>	<b>11</b>

**INDUSTRIAL MOTOR CONTROL TECHNICIAN (IM41)**

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

	Credit Hours
IDSY 1110 Industrial Motor Controls I	4
IDSY 1130 Industrial Wiring	4
IDSY 1210 Industrial Motor Controls II	4
<b>Total Hours</b>	<b>12</b>

**INSTRUMENTATION AND CONTROLS TECHNICIAN I (IA31)**

Technical Certificate of Credit

Provides additional educational opportunities for plant personnel or other experienced individuals who need further training in the area of instrumentation and control maintenance functions such as troubleshooting, repair, and installation of instruments, control devices, and electronic equipment. Instruction is performed through a combination of theory and hands-on training.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/IA31](http://www.centralgatech.edu/gainfulemployment/IA31)

	Credit Hours
IDSY 1110 Industrial Motor Controls I	4
IDSY 1120 Basic Industrial PLCs	4
IDSY 1210 Industrial Motor Controls II	4
IDSY 1230 Industrial Instrumentation	4
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit analysis	(3)
<b>Total Hours</b>	<b>22</b>

**MECHANICAL MAINTENANCE TECHNICIAN (MM31)**

Technical Certificate of Credit

Provides instruction in industrial mechanical and machine tool disciplines. Graduates are qualified for employment in commercial and industrial industries.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MM31](http://www.centralgatech.edu/gainfulemployment/MM31)

	Credit Hours
IDSY 1170 Industrial Mechanics	4
IDSY 1190 Fluid Power Systems	4
IDSY 1195 Pumps and Piping Systems	3
MCHT 1011 Introduction to the Machine Tool	4
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
WELD 1040 Flat Shielded Metal Arc Welding	4
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>27</b>

**PROGRAMMABLE CONTROL TECHNICIAN I (PC81)**

Technical Certificate of Credit

Offers specialized training in programmable controllers. Topics include motor control fundamentals, and instruction

in basic and advanced PLCs.

IDSY 1210 Industrial Motor Controls II 4  
**Total Hours 10**

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

		Credit Hours
IDSY 1110	Industrial Motor Controls I	4
IDSY 1120	Basic Industrial PLCs	4
IDSY 1220	Intermediate Industrial PLCs	4
<b>Total Hours</b>		<b>12</b>

### RESIDENTIAL/INDUSTRIAL WIRING TECHNICIAN (RW41)

Technical Certificate of Credit

Trains students to perform their duties more efficiently by being knowledgeable of residential/industrial wiring principles and practical applications. The program will prepare students to enter employment proficient in industrial maintenance applications and upgrade skills of current industrial maintenance personnel working in the field.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/RW41](http://www.centralgatech.edu/gainfulemployment/RW41)

		Credit Hours
MATH 1013	Algebraic Concepts	3
IDSY 1110	Industrial Motor Controls I	4
IDSY 1130	Industrial Wiring	4
IDFC 1011	Direct Current I	3
or IDSY 1101	DC Circuit Analysis	(3)
ELTR 1020	Alternating Current Fundamentals	3
or IDFC 1012	Alternating Current I	(3)
or IDSY 1105	AC Circuit Analysis	(3)
<b>Total Hours</b>		<b>17</b>

### INTRODUCTION TO MOTOR CONTROLS (IT61)

Technical Certificate of Credit

*Effective Fall 2018 (201912)*

The Introduction to Motor Controls technical certificate provides hands-on experience for students. This embedded certificate allows for a seamless pathway for students interested in the Industrial Systems Technology profession.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

		Credit Hours
IDFC 1007	Industrial Safety Procedures	2
IDSY 1110	Industrial Motor Controls I	4

## MACHINE TOOL TECHNOLOGY

### MACHINE TOOL TECHNOLOGY (MTT2)

Diploma

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 have the qualification of a machine tool technician.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/MTT2](http://www.centralgatech.edu/gainfulemployment/MTT2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>34</b>
COMP 1000 Introduction to Computer Literacy	3
AMCA 2110 CNC Fundamentals	3
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
MCHT 1020 Heat Treatment and Surface Grinding	3
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
MCHT 1219 Lathe Operations II	3
MCHT 1220 Mill Operations II	3
MCHT 1013 Machine Tool Math	3
or MATH 1015 Geometry and Trigonometry	(3)
<i>Choose a minimum of three hours from:</i>	
MCHT 1030 Applied Measurement	3
DFTG 1101 CAD Fundamentals	4
WELD 1000 Introduction to Welding Technology	4
MATH 1015 Geometry and Trigonometry	3
PSYC 1010 Basic Psychology	3
<b>Total Hours</b>	<b>42</b>

### BASIC MACHINING OPERATOR (BMO1)

Technical Certificate of Credit

Prepares students for entry level machine shop employment by providing the knowledge and skills in basic machining operations. Instruction is provided in blueprint reading, lathe, mill, and surface grinder operation, mathematical functions, and an introduction to the machine tool industry.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BMO1](http://www.centralgatech.edu/gainfulemployment/BMO1)

#### Effective Fall 2018 (201912)

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Print Reading for Machine Tool	3
MCHT 1013 Machine Tool Math	3
MCHT 1020 Heat Treatment and Surface Grinding	4
MCHT 1119 Lathe Operations I	4
MCHT 1120 Mill Operations I	4
<b>Total Hours</b>	<b>22</b>

#### Prior to Fall 2018 (201912)

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
MCHT 1013 Machine Tool Math	3
MCHT 1020 Heat Treatment and Surface Grinding	3
MCHT 1119 Lathe Operations I	3
MCHT 1120 Mill Operations I	3
<b>Total Hours</b>	<b>19</b>

### BASIC MACHINIST (BM31)

Technical Certificate of Credit

Prepares students for a machine tool operator position with a machine shop or machine tool establishment. Topics include foundations of mathematics, an introduction to machine tool technology, and blueprint reading for machine tool applications.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Effective Fall 2018 (201912)

	Credit Hours
MATH 1012 Foundations of Mathematics	3
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Print Reading for Machine Tool	3
<b>Total Hours</b>	<b>10</b>

#### Prior to Fall 2018 (201912)

	Credit Hours
MATH 1012 Foundations of Mathematics	3
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
<b>Total Hours</b>	<b>10</b>

### CNC SPECIALIST (CS51)

Technical Certificate of Credit

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.

#### Education Requirements



**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Warner Robins

**Gainful Employment:**  
[www.centralgatech.edu/gainfulemployment/CS51](http://www.centralgatech.edu/gainfulemployment/CS51)

**Effective Fall 2018 (201912)**

	Credit Hours
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
<b>Total Hours</b>	<b>22</b>

**Prior to Fall 2018 (201912)**

	Credit Hours
AMCA 2110 CNC Fundamentals	3
AMCA 2130 CNC Mill Manual Programming	5
AMCA 2150 CNC Lathe Manual Programming	5
AMCA 2170 CNC Practical Applications	3
AMCA 2190 CAD/CAM Programming	4
<b>Total Hours</b>	<b>20</b>

### LATHE OPERATOR (LP11)

Technical Certificate of Credit

Prepares students to use lathes, lathe set up, and lathe tool grinding. Emphasis is placed on cutting threads, boring holes to precise measurements, and cutting tapers. Topics include an introduction to machine tool technology, blueprint reading for machine tool, and basic and advanced lathe operations.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Warner Robins

**Effective Fall 2018 (201912)**

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Print Reading for Machine Tool	3
MCHT 1119 Lathe Operations I	4
MCHT 1219 Lathe Operations II	4
<b>Total Hours</b>	<b>15</b>

**Prior to Fall 2018 (201912)**

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
MCHT 1119 Lathe Operations I	3
MCHT 1219 Lathe Operations II	3
<b>Total Hours</b>	<b>13</b>

### MILL OPERATOR (MP11)

Technical Certificate of Credit

Teaches students to effectively operate milling machinery. Students become proficient in blueprint reading, general

mathematical operations, and are provided the necessary knowledge and skills to obtain employment as a milling machinist.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Warner Robins

**Effective Fall 2018 (201912)**

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Print Reading for Machine Tool	3
MCHT 1120 Mill Operations I	4
MCHT 1220 Mill Operations II	4
<b>Total Hours</b>	<b>15</b>

**Prior to Fall 2018 (201912)**

	Credit Hours
MCHT 1011 Introduction to Machine Tool	4
MCHT 1012 Blueprint for Machine Tool	3
MCHT 1120 Mill Operations I	3
MCHT 1220 Mill Operations II	3
<b>Total Hours</b>	<b>13</b>

### PRECISION MACHINE AND MANUFACTURING (MTT2)

Diploma

**Effective Fall 2018 (201912)**

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Warner Robins

**General Education Core Courses**

EMPL 1000 Interpersonal Relations and Professional Development	8
	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3

**Occupational Courses**

AMCA 2110 CNC Fundamentals	40
COMP 1000 Introduction to Computer Literacy	4
AMCA 2110 CNC Fundamentals	3
MCHT 1011 Introduction to Machine Tool	3
MCHT 1012 Print Reading for Machine Tool	4
MCHT 1020 Heat Treatment and 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
MCHT 1013 Machine Tool Math	4

or MCHT 1013 Algebraic Concepts (3)  
or MATH 1015 Geometry and Trigonometry (3)

*Choose a minimum of three hours from:*

MCHT 1030	Applied Measurement	3
DFTG 1101	CAD Fundamentals	4
WELD 1000	Introduction to Welding Technology	4
MATH 1015	Geometry and Trigonometry	3
PSYC 1010	Basic Psychology	3
<b>Total Hours</b>		<b>48</b>

## METROLOGY

### METROLOGY (ME13)

Associate Degree

Meets the precision measurement needs of industry by preparing graduates, through both theoretical and hands-on laboratory work, to successfully enter the work force. The emphasis of this program is physical and electrical dimensional metrology.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Online

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
IDFC 1007 Industrial Safety Procedures	2
IDFC 1013 Solid State Devices I	3
METR 1101 Introduction to Quality, Standards, and ISO 9000	3
METR 1111 Introduction to Measure Standards and Technology	3
METR 1132 Mechanical Measurements	3
METR 1141 Quality Control and Statistics	3
METR 1161 Physical Metrology	3
METR 1163 Dimensional Metrology	4
METR 2111 Electronic Measuring Instruments	4
METR 2121 Modern Communications Systems	3
METR 2131 RF And Microwave Technology	3
METR 2211 Introduction to Automated Metrology	3
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
XXXX xxxx Occupationally Related Elective	2
<b>Occupationally-Related Electives:</b>	
CIST 1101 Working with Microsoft Windows	3
COMP 1000 Introduction to Computer Literacy	3
<b>Total Hours</b>	<b>60</b>

### METROLOGY (ME24)

Diploma

Designed to meet the precision measurement needs of industry by preparing graduates, through both theoretical and hands-on laboratory work, to successfully enter the work force.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ME24](http://www.centralgatech.edu/gainfulemployment/ME24)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1013 Algebraic Concepts	3
<b>Occupational Courses</b>	<b>46</b>
IDFC 1007 Industrial Safety Procedures	2
IDFC 1013 Solid State Devices I	3
METR 1101 Introduction to Quality, Standards, and ISO 9000	3
METR 1111 Introduction to Measure Standard and Technology	3
METR 1132 Mechanical Measurements	3
METR 1141 Quality Control and Statistics	3
METR 1161 Physical Metrology	3
METR 1163 Dimensional Metrology	4
METR 2111 Electronic Measuring Instruments	4
METR 2121 Modern Communications Systems	3
METR 2131 RF And Microwave Technology	3
METR 2211 Introduction to Automated Metrology	3
PHSC 1111 Physical Science	3
ELTR 1020 Alternating Current Fundamentals	3
or IDFC 1012 Alternating Current I	(3)
or IDSY 1105 AC Circuit Analysis	(3)
IDFC 1011 Direct Current I	3
or IDSY 1101 DC Circuit Analysis	(3)
<b>Total Hours</b>	<b>54</b>

### CALIBRATION TECHNICIAN (CT41)

Technical Certificate of Credit

Introduces the history of national and international quality standards, core opportunities, safety, basic AC-DC theory and application, statistical analysis, dimensional measurements and other measurement disciplines.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CT41](http://www.centralgatech.edu/gainfulemployment/CT41)

MATH 1013 Algebraic Concepts	3
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MATH 1015	Geometry and Trigonometry	3	METR 1163	Dimensional Metrology	4
METR 1101	Introduction to Quality, Standards, and ISO 9000	3	PHSC 1111	Physical Science	3
METR 1111	Introduction to Measure Standards and Technology	3		<b>Total Hours</b>	<b>22</b>
METR 1141	Quality Control and Statistics	3			
METR 1161	Physical Metrology	3			
PHSC 1111	Physical Science	3			
	<b>Total Hours</b>	<b>21</b>			

### ELECTRONIC METROLOGY TECHNICIAN (EM91)

Technical Certificate of Credit

Provides an introduction to many devices and circuits commonly used in instrumentation. Topics include voltage, standard resistors, capacitors, frequency and frequency conductors, and spectrum analysis.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/EM91](http://www.centralgatech.edu/gainfulemployment/EM91)

	Credit Hours	
COMP 1000	Introduction to Computer Literacy	3
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3
METR 1101	Introduction to Quality, Standards, and ISO 9000	3
METR 1111	Introduction to Measure Standards and Technology	3
METR 1132	Mechanical Measurements	3
PHSC 1050	Applied Physical Science	3
	<b>Total Hours</b>	<b>21</b>

### PHYSICAL METROLOGY TECHNICIAN (PM31)

Technical Certificate of Credit

Offers an introductory study of physical measurements (temperature, mass, force, pressure, vacuum, flow, density, etc.) and measuring instruments emphasizing the theory and proper use of equipment and thorough knowledge of laboratory technique.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PM31](http://www.centralgatech.edu/gainfulemployment/PM31)

	Credit Hours	
COMP 1000	Introduction to Computer Literacy	3
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3
METR 1111	Introduction to Measure Standards and Technology	3
METR 1161	Physical Metrology	3

# PLUMBING

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## RESIDENTIAL/COMMERCIAL PLUMBING TECHNICIAN (RP11)

Technical Certificate of Credit

Offers students basic skills in plumbing technology, construction, maintenance, and repair. Students completing the certificate program are prepared for entry level employment as a residential plumber.

### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** None  
**Semester(s) Offered:** At discretion of the partnership  
**Location(s) Offered:** GDC

		<b>Credit Hours</b>
PLBG 1000	Introduction to Plumbing	3
PLBG 1160	Plumbing Drawings	3
PLBG 1210	Pipes, Valves, and Fittings	3
PLBG 1220	Drainage Systems	3
PLBG 1240	Water Supply Systems	3
PLBG 1260	Plumbing Fixtures and Appliances	3
PLBG 1280	Gas Piping, Venting, and Appliances	3
	<b>Total Hours</b>	<b>21</b>

## WELDING AND JOINING TECHNOLOGY

### WELDING AND JOINING TECHNOLOGY (WAJ2) Diploma

Prepares 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 have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Putnam   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/WAJ2](http://www.centralgatech.edu/gainfulemployment/WAJ2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3

#### Occupational Courses

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 Shielded 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
XXXX xxxx Occupationally-Related Elective(s)	6

#### Occupationally-Related Electives:

WELD 1095 Advanced Gas Metal Arc Welding	3
WELD 1150 Advanced Gas Tungsten Arc Welding	3
WELD 1151 Fabrication Processes	3
WELD 1152 Pipe Welding	4
WELD 1153 Flux Cored Arc Welding	4
WELD 1156 Ornamental Iron Works	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>54</b>

### ADVANCED SHIELDED METAL ARC WELDER (OSM1) Technical Certificate of Credit

Serves as a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16

**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Peach | Putnam | VECTR | Warner Robins

	Credit Hours
WELD 1050 Horizontal Shielded Metal Arc Welding	4
WELD 1060 Vertical Shielded Metal Arc Welding	4
WELD 1070 Overhead Shielded Metal Arc Welding	4
<b>Total Hours</b>	<b>12</b>

### BASIC SHIELDED METAL ARC WELDER (FS31) 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.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Adjusted
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Peach   Putnam   VECTR   Warner Robins

	Credit Hours
WELD 1000 Introduction to Welding Technology	4
WELD 1010 Oxyfuel and Plasma Cutting	4
WELD 1040 Flat Shielded Metal Arc Welding	4
<b>Total Hours</b>	<b>12</b>

### GAS METAL ARC WELDER (GM31) 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Peach   Putnam   VECTR   Warner Robins   GDC

	Credit Hours
WELD 1000 Introduction to Welding Technology	4
WELD 1010 Oxyfuel and Plasma Cutting	4
WELD 1090 Gas Metal Arc Welding	4
XXXX xxxx Occupationally-Related Elective(s)	3

#### Occupationally-Related Electives:

WELD 1095 Advanced Gas Metal Arc Welding	3
WELD 1150 Advanced Gas Tungsten Arc Welding	3
WELD 1151 Fabrication Processes	3
WELD 1152 Pipe Welding	4
WELD 1153 Flux Cored Arc Welding	4
WELD 1156 Ornamental Iron Works	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>15</b>

## GAS TUNGSTEN ARC WELDER (GTA1)

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.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Peach   Putnam   VECTR   Warner Robins   GDC

	Credit Hours
WELD 1000 Introduction to Welding Technology	4
WELD 1010 Oxyfuel and Plasma Cutting	4
WELD 1110 Gas Tungsten Arc Welding	4
XXXX xxxx Occupationally-Related Elective(s)	3

### Occupationally-Related Electives:

WELD 1095 Advanced Gas Metal Arc Welding	3
WELD 1150 Advanced Gas Tungsten Arc Welding	3
WELD 1151 Fabrication Processes	3
WELD 1152 Pipe Welding	4
WELD 1153 Flux Cored Arc Welding	4
WELD 1156 Ornamental Iron Works	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>15</b>

## VERTICAL SHIELDED METAL ARC WELDING FABRICATOR (VSM1)

Technical Certificate of Credit

Prepares students for careers in shielded metal arc welding fabrication.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Peach   Putnam   VECTR   Warner Robins

	Credit Hours
WELD 1000 Introduction to Welding Technology	4
WELD 1010 Oxyfuel and Plasma Cutting	4
WELD 1110 Gas Tungsten Arc Welding	4
XXXX xxxx Occupationally-Related Elective(s)	3

### Occupationally-Related Electives:

WELD 1095 Advanced Gas Metal Arc Welding	3
WELD 1150 Advanced Gas Tungsten Arc Welding	3
WELD 1151 Fabrication Processes	3
WELD 1152 Pipe Welding	4
WELD 1153 Flux Cored Arc Welding	4
WELD 1156 Ornamental Iron Works	3
WELD 1330 Metal Welding and Cutting Techniques	2
<b>Total Hours</b>	<b>15</b>

## PIPE WELDER (PW11)

Technical Certificate of Credit

Provides instruction in the specialized field of pipe welding. A good understanding and skill base is essential for the completion of this program. Topics include advanced gas tungsten arc welding practices, fabrication practices, and pipe welding techniques.

**Conditional Program Admission:** Student must be a Welding and Joining Technology diploma graduate to enroll in this program.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	
<b>Location(s) Offered:</b>	Putnam

	Credit Hours
WELD 1150 Advanced Gas Tungsten Arc Welding or WELD 1075 Gas Tungsten Arc Welding Pipe Welding	3 (4)
WELD 1151 Fabrication Processes	3
WELD 1152 Pipe Welding or WELD 1055 Shielded Metal Arc Welding Pipe Welds	4 (3)
<b>Total Hours</b>	<b>9</b>





# Business and Computer Technologies

Accounting

Banking and Finance

Business Technology

Business Management

Computer Programming

Computer Support Specialist

Design and Media Production

Hotel/Restaurant/Tourism Management

Information Technology Professional

Logistics Management

Marketing

Networking Specialist

Sports and Fitness Management

Web Site Design/Development

Information Technology Technical Certificates of Credit

## AAS - APPLIED TECHNICAL MANAGEMENT

### AAS-APPLIED TECHNICAL MANAGEMENT (AS33)

Associate Degree

Allows a student who has completed a diploma in a TCSG program area to continue to this AAS. In addition to the skills and knowledge obtained in the diploma, the student will obtain degree-level general education knowledge and business related skills and knowledge.

**Conditional Program Admission:** Student must have graduated or be eligible to graduate from a diploma in a TCSG program area and obtain advisor approval to enroll in this program.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>53</b>
Completion of diploma program	37
MGMT 1100 Principles of Management	3
MGMT 1105 Organizational Behavior	3
MGMT 1110 Employment Rules and Regulations	3
or ACCT 2140 Legal Environment of Business	(3)
or MKTG 1130 Business Regulations and Compliance	(3)
MGMT 2125 Performance Management	3
ACCT 1100 Financial Accounting I	4
<b>Total Hours</b>	<b>68</b>

# ACCOUNTING

## ACCOUNTING (AC13)

Associate Degree

Prepares students for a variety of accounting careers in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills for job acquisition, retention, and advancement.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>49</b>
BUSN 1440 Document Production	4
COMP 1000 Introduction to Computer Literacy	3
ACCT 1100 Financial Accounting I	4
ACCT 1105 Financial Accounting II	4
ACCT 2000 Managerial Accounting	3
ACCT 1115 Computerized Accounting	3
ACCT 1120 Spreadsheet Applications	4
ACCT 1125 Individual Tax Accounting	3
ACCT 1130 Payroll Accounting	3
XXXX xxxx Occupational Elective(s)**	9
ACCT xxxx Accounting Elective(s)	9
<b>Accounting Electives:</b>	
ACCT 2120 Business Tax Accounting	3
ACCT 2135 Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140 Legal Environment of Business	3
ACCT 2145 Personal Finance	3
ACCT 2150 Principles of Auditing	3
ACCT 2155 Principles of Fraud Examination	3
<b>Total Hours</b>	<b>64</b>

\*\*Students may take any course except learning support

## ACCOUNTING (AC12)

Diploma

Prepares students for a variety of entry-level accounting careers in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AC12](http://www.centralgatech.edu/gainfulemployment/AC12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Mathematics	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	(3)
<b>Occupational Courses</b>	<b>34</b>
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
BUSN 1440 Document Production	4
COMP 1000 Introduction to Computer Literacy	3
ACCT 2000 Managerial Accounting	3
or ACCT 2120 Business Tax Accounting	3
or ACCT 2135 Introduction to Governmental and Nonprofit Accounting	3
or ACCT 2140 Legal Environment of Business	3
or ACCT 2145 Personal Finance	3
or ACCT 2150 Principles of Auditing	3
or ACCT 2155 Principles of Fraud Examination	3
XXXX xxxx Occupationally-Guided Elective	3
<b>Occupationally-Guided Electives:</b>	
BAFN xxxx Banking and Finance	
BUSN xxxx Business Technology	
HRTM xxxx Hotel/Restaurant/Tourism Management	
MGMT xxxx Business Management	
MKTG xxxx Marketing	
SCMA xxxx Distribution and Materials Management	
<b>Total Hours</b>	<b>42</b>

**AUDITING AND ASSURANCES SPECIALIST (AAA1)**

Technical Certificate of Credit

Prepares students for employment as accounting auditing assistants. Graduates will be competent in the technical areas of auditing and business law, and ethics, taxation, personal services and merchandising business accounting; account classification and subsidiary record accounting; corporate accounting; cost accounting; and budgeting. This certificate is embedded and is considered to be an advanced entry-level program.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/AAA1](http://www.centralgatech.edu/gainfulemployment/AAA1)

		Credit Hours
ACCT 2000	Managerial Accounting	3
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2150	Principles of Auditing	3
<b>Total Hours</b>		<b>18</b>

**COMPUTERIZED ACCOUNTING SPECIALIST (CAY1)**

Technical Certificate of Credit

Provides students with skills needed to perform a variety of accounting applications using accounting software and practical accounting procedures. Topics include: principles of accounting, computerized accounting, spreadsheet fundamentals and basic computers.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/CAY1](http://www.centralgatech.edu/gainfulemployment/CAY1)

		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
COMP 1000	Introduction to Computer Literacy	3
XXXX xxxx	Occupational Elective	3
<b>Occupational Electives:</b>		
ACCT 2000	Managerial Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
ACCT 2155	Principles of Fraud Examination	3
<b>Total Hours</b>		<b>21</b>

**OFFICE ACCOUNTING SPECIALIST (OA31)**

Technical Certificate of Credit

Provides entry-level office accounting skills. Topics include: principles of accounting, computerized accounting and basic computer skills.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
COMP 1000	Introduction to Computer Literacy	3
<b>Total Hours</b>		<b>14</b>

**PAYROLL ACCOUNTING SPECIALIST (PA61)**

Technical Certificate of Credit

Provides entry-level skills into payroll accounting. Topics include: principles of accounting, computerized accounting, principles of payroll accounting, mathematics and basic computer use.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/PA61](http://www.centralgatech.edu/gainfulemployment/PA61)

		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1130	Payroll Accounting	3
COMP 1000	Introduction to Computer Literacy	3
<b>Total Hours</b>		<b>17</b>

**TAX PREPARATION SPECIALIST (TPS1)**

Technical Certificate of Credit

Provides entry-level skills for tax preparers. Topics include: principles of accounting, tax accounting, business calculators, mathematics, and basic computer skills.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/TPS1](http://www.centralgatech.edu/gainfulemployment/TPS1)

		Credit Hours
ACCT 1100	Financial Accounting I	4

ACCT 1125	Individual Tax Accounting	3
ACCT 2120	Business Tax Accounting	3
COMP 1000	Introduction to Computer Literacy	3
ACCT xxxx	Accounting Elective	3

***Accounting Electives:***

ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1130	Payroll Accounting	3
ACCT 2000	Managerial Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
ACCT 2155	Principles of Fraud Examination	3
<b>Total Hours</b>		<b>16</b>

# BANKING AND FINANCE

## BANKING AND FINANCE (BAF3)

Associate Degree

Prepares students for employment in a variety of positions in today's banking, insurance, mortgage, and financial services industries. The program provides learning opportunities that assist and reinforce industry needs. The program emphasizes a combination of advanced banking and finance theory and the practical application necessary for successful employment. The program is designed for new, current, or returning students for skill and knowledge enhancement.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### General Education Core Courses

*Area I - Language Arts/Communication*  
 ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*  
 ECON 1101 Principles of Economics 3

*Area III - Natural Sciences/Mathematics*  
 MATH 1103 Quantitative Skills and Reasoning 3  
 or MATH 1101 Mathematical Modeling (3)  
 or MATH 1111 College Algebra (3)

*Area IV - Humanities/Fine Arts*  
 XXXX xxxx Humanities/Fine Arts Elective 3  
 XXXX xxxx General Education Core Elective (Areas I - IV) 3

### Occupational Courses 49

ACCT 1100 Financial Accounting I 4  
 ACCT 1105 Financial Accounting II 4  
 ACCT 1120 Spreadsheet Applications 4  
 BAFN 1100 Introduction to Banking and Finance 3  
 BAFN 1105 Bank Business and Information Systems 3  
 BAFN 1110 Money and Banking 3  
 BAFN 1115 Personal Financial Planning 3  
 BAFN 2200 Finance 3  
 BAFN 2205 Real Estate Finance 3  
 BAFN 2210 Contemporary Bank Management 3  
 BAFN 2215 Investments 3  
 BUSN 1440 Document Production 4  
 COMP 1000 Introduction to Computer Literacy 3  
 MKTG 1130 Business Regulations and Compliance 3  
 XXXX xxxx Occupational-Guided Electives 3

### Occupational-Guided Electives:

ACCT 2000 Managerial Accounting 3  
 ACCT 1115 Computerized Accounting 3  
 ACCT 1125 Individual Tax Accounting 3  
 ACCT 2120 Business Tax Accounting 3  
 ACCT 2140 Legal Environment of Business 3  
 ACCT 2150 Principles of Auditing 3  
 MGMT 1100 Principles of Management 3  
 MGMT 1105 Organizational Behavior 3  
 MGMT 1110 Employment Rules and Regulations 3  
 MGMT 1115 Leadership 3  
 MGMT 1125 Business Ethics 3

MKTG 1162 Customer Contact Skills 4  
 MKTG 1370 Consumer Behavior 3  
**Total Hours 64**

## BANKING AND FINANCE (BAF2)

Diploma

Prepares students for employment in a variety of positions in today's banking, insurance, mortgage, and financial services industries. The program provides learning opportunities that assist and reinforce industry needs. The program emphasizes a combination of advanced banking and finance theory and the practical application necessary for successful employment. The program is designed for new, current, or returning students for skill and knowledge enhancement.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BAF2](http://www.centralgatech.edu/gainfulemployment/BAF2)

### General Education Core Courses

ENGL 1010 Fundamentals of English I 3  
 or ENGL 1101 Composition and Rhetoric (3)  
 MATH 1011 Business Math 3  
 or MATH 1103 Quantitative Skills and Reasoning (3)  
 or MATH 1101 Mathematical Modeling (3)  
 or MATH 1111 College Algebra (3)  
 EMPL 1000 Interpersonal Relations and Professional Development 2  
 or PSYC 1010 Basic Psychology (3)

### Occupational Courses 43

ACCT 1100 Financial Accounting I 4  
 ACCT 1105 Financial Accounting II 4  
 ACCT 1120 Spreadsheet Applications 4  
 BAFN 1100 Introduction to Banking and Finance 3  
 BAFN 1105 Bank Business and Information Systems 3  
 BAFN 1110 Money and Banking 3  
 BAFN 1115 Personal Financial Planning 3  
 BAFN 2200 Finance 3  
 BUSN 1440 Document Production 4  
 COMP 1000 Introduction to Computer Literacy 3  
 MKTG 1130 Business Regulations and Compliance 3  
 MKTG 1160 Professional Selling 3  
 XXXX xxxx Occupational-Guided Electives 3

### Occupational-Guided Electives:

ACCT 2000 Managerial Accounting 3  
 ACCT 1115 Computerized Accounting 3  
 ACCT 1125 Individual Tax Accounting 3  
 ACCT 2120 Business Tax Accounting 3  
 ACCT 2140 Legal Environment of Business 3  
 ACCT 2150 Principles of Auditing 3  
 MGMT 1100 Principles of Management 3  
 MGMT 1105 Organizational Behavior 3  
 MGMT 1110 Employment Rules and Regulations 3  
 MGMT 1115 Leadership 3  
 MGMT 1125 Business Ethics 3  
 MKTG 1162 Customer Contact Skills 4  
 MKTG 1370 Consumer Behavior 3

Total Hours 51

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### **BANKING AND FINANCE SPECIALIST (BC71)**

Technical Certificate of Credit

*Effective Spring 2018 (201814)*

The Banking and Finance Specialist technical certificate program introduces the concepts and skills necessary to be productive within the banking and financial service industry.

#### **Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

		<b>Credit Hours</b>
ACCT 1100	Financial Accounting I	4
BAFN 1100	Introduction to Banking and Finance	3
BAFN 1110	Money and Banking	3
BAFN 1115	Personal Financial Planning	3
COMP 1000	Introduction to Computer Literacy	3
	<b>Total Hours</b>	<b>16</b>

## BUSINESS TECHNOLOGY

### BUSINESS TECHNOLOGY (BA23)

Associate Degree

Prepares graduates for employment in a variety of positions in today's technology-driven workplaces. The Business 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 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>49</b>
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
ACCT 1100 Financial Accounting I	4
or BUSN 2200 Office Accounting	(4)
<i>Choose six hours from the following BUSN electives:</i>	
BUSN 1100 Introduction to Keyboarding	3
BUSN 1210 Electronics Calculators	2

BUSN 1230	Legal Terminology	3
BUSN 1250	Records Management	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1320	Business Interaction Skills	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
BUSN 2170	Web Page Design	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2220	Legal Administrative Procedures	3
BUSN 2230	Office Management	3
BUSN 2240	Business Administrative Assistant Internship I	4
BUSN 2250	Business Administrative Assistant Internship II	6
BUSN 2300	Medical Terminology	2
BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3
BUSN 2320	Medical Document Processing/Transcription	4
BUSN 2340	Medical Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2360	Acute Care Medical Transcription	4
BUSN 2370	Medical Office Billing/Coding/Insurance	3
MGMT 1125	Business Ethics	3
MGMT 2215	Team Project	3
<b>Total Hours</b>		<b>64</b>

### BUSINESS TECHNOLOGY (BA22)

Diploma

Prepares graduates for employment in a variety of positions in today's technology-driven workplaces. The Business 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 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 technology.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BA22](http://www.centralgatech.edu/gainfulemployment/BA22)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Math	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	(3)



<b>Occupational Courses</b>	<b>18</b>
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
ACCT 1100 Financial Accounting I	4
or BUSN 2200 Office Accounting	(4)

**Select one specialization:**

<i>Business Administrative Assistant Specialization (8BA2)</i>	<b>24</b>
BUSN 1190 Digital Technologies In Business	2
BUSN 1240 Office Procedures	3
BUSN 1410 Spreadsheet Concepts and Applications	4
BUSN 1430 Desktop Publishing and Presentation Applications	4
BUSN 2160 Electronic Mail Applications	2
BUSN 2210 Applied Office Procedures	3

- AND

*Choose six hours from the following BUSN electives:*

BUSN 1100 Introduction to Keyboarding (Required)	3
BUSN 1210 Electronics Calculators	2
BUSN 1220 Telephone Training	2
BUSN 1230 Legal Terminology	3
BUSN 1250 Records Management	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 1420 Database Applications	4
BUSN 2170 Web Page Design	2
BUSN 2180 Speed and Accuracy Keying	1
BUSN 2220 Legal Administrative Procedures	3
BUSN 2240 Business Administrative Assistant Internship I	4
BUSN 2250 Business Administrative Assistant Internship II	6
BUSN 2300 Medical Terminology	2
BUSN 2310 Anatomy and Terminology for the Medical Administrative Assistant	3
BUSN 2320 Medical Document Processing/Transcription	4
BUSN 2330 Advanced Medical Document Processing/Transcription	4
BUSN 2340 Medical Administrative Procedures	4
BUSN 2350 Electronic Health Records	3
BUSN 2360 Acute Care Medical Transcription	4
BUSN 2370 Medical Office Billing/Coding/Insurance	3

*Medical Administrative Assistant Specialization (8M12)* **24**

MAST 1120 Human Diseases	3
BUSN 2340 Medical Administrative Procedures	4
BUSN 2370 Medical Office Billing/Coding/Insurance	3
ALHS 1010 Introduction to Anatomy and Physiology	4
or ALHS 1011 Structure and Function of the Human Body	(5)
or BUSN 2310 Anatomy and Terminology for the Medical Administrative Assistant	(3)
BUSN 2300 Medical Terminology	2
or ALHS 1090 Medical Terminology for Allied Health Sciences	(2)

*Choose nine hours from the following BUSN electives:*

BUSN 1100 Introduction to Keyboarding (Required)	3
BUSN 1190 Digital Technologies in Business	2

BUSN 1210 Electronics Calculators	2
BUSN 1220 Telephone Training	2
BUSN 1230 Legal Terminology	3
BUSN 1240 Office Procedures	3
BUSN 1250 Records Management	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 1410 Spreadsheet Concepts	4
BUSN 1420 Database Applications	4
BUSN 1430 Desktop Publishing and Presentation Applications	4
BUSN 2160 Electronic Mail Applications	2
BUSN 2170 Web Page Design	2
BUSN 2180 Speed and Accuracy Keying	1
BUSN 2210 Applied Office Procedures	3
BUSN 2220 Legal Administrative Procedures	3
BUSN 2320 Medical Document Processing/Transcription	4
BUSN 2330 Advanced Medical Document Processing/Transcription	4
BUSN 2350 Electronic Health Records	3
BUSN 2360 Acute Care Medical Transcription	4
BUSN 2380 Medical Administrative Assistant Internship I	4
BUSN 2390 Medical Administrative Assistant Internship II	6
<b>Total Hours</b>	<b>50</b>

**ADMINISTRATIVE OFFICE SPECIALIST (AF11)**

Technical Certificate of Credit

Provides experience in Microsoft Outlook, PowerPoint, and other Microsoft Office software programs, as well as office management and keyboarding. The acquisition of these software applications, office management, and business skills will increase the student's employability for current office environments.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

**Gainful Employment:**
[www.centralgatech.edu/gainfulemployment/AF11](http://www.centralgatech.edu/gainfulemployment/AF11)

	<b>Credit Hours</b>
BUSN 1310 Introduction to Business Culture	3
BUSN 1430 Desktop Publishing & Presentation Applications	4
BUSN 1440 Document Production	4
BUSN 2160 Electronic Mail Applications	2
BUSN 2230 Office Management	3
COMP 1000 Introduction to Computer Literacy	3
ENGL 1010 Fundamentals of English I	3
<b>Total Hours</b>	<b>22</b>

**ADMINISTRATIVE SUPPORT ASSISTANT (AS21)**

Technical Certificate of Credit

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.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | GDC

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/AS21](http://www.centralgatech.edu/gainfulemployment/AS21)

	<b>Credit Hours</b>
COMP 1000 Introduction to Computer Literacy	3
BUSN 1240 Office Procedures	3
BUSN 1400 Word Processing Applications	4
BUSN 1440 Document Production	4
BUSN xxxx Business Elective(s)	6
<b>Business Electives:</b>	
BUSN 1015 Introduction to Medical Insurance	4
BUSN 1100 Introduction to Keyboarding	3
BUSN 1180 Computer Graphics and Design	3
BUSN 1190 Digital Technologies in Business	2
BUSN 1200 Machine Transcription	2
BUSN 1210 Electronics Calculators	2
BUSN 1220 Telephone Training	2
BUSN 1230 Legal Terminology	3
BUSN 1250 Records Management	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1320 Business Interaction Skills	3
BUSN 1330 Personal Effectiveness	3
BUSN 1340 Customer Service Effectiveness	3
BUSN 1410 Spreadsheet Concepts and Applications	4
BUSN 1420 Database Applications	4
BUSN 1430 Desktop Publishing & Presentation Applications	4
BUSN 2160 Electronic Mail Applications	2
BUSN 2170 Web Page Design	2
BUSN 2180 Speed and Accuracy Keying	1
BUSN 2190 Business Document Proofreading & Editing	3
BUSN 2200 Office Accounting	4
BUSN 2210 Applied Office Procedures	3
BUSN 2230 Office Management	3
BUSN 2300 Medical Terminology	2
BUSN 2310 Anatomy and Terminology for the Medical Administrative Assistant	3
BUSN 2320 Medical Document Processing/Transcription	4
BUSN 2330 Advanced Medical Document Processing/Transcription	4
BUSN 2340 Medical Administrative Procedures	4
BUSN 2350 Electronic Health Records	3
BUSN 2360 Acute Care Medical Transcription	4
BUSN 2370 Medical Office Billing/Coding/Insurance	3
<b>Total Hours</b>	<b>20</b>

**BUSINESS AND CUSTOMER SERVICE TECHNOLOGY (BA21)**

Technical Certificate of Credit

Introduces the student to the dynamics of providing exceptional customer service in a variety of customer service settings. The training includes an overview of the service industry, why service is important, and the demand for skilled customer service representatives. Training also includes developing skills that help the learner: project the right image and develop interpersonal skills, build rapport, problem solve, address diversity, and work collaboratively. Learners also train on the Microsoft Window Environment and learn to produce documents in Microsoft Office applications.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** None  
**Semester(s) Offered:** At discretion of the partnership  
**Location(s) Offered:** GDC

	<b>Credit Hours</b>
BCST 1000 Interpersonal Development	2
BCST 1010 Survey of Technology	3
BCST 1020 Office Management	2
BCST 1030 Advanced Office Management	2
<b>Total Hours</b>	<b>9</b>

**LEGAL ADMINISTRATIVE ASSISTANT (LA11)**

Technical Certificate of Credit

Prepares students for immediate employment as entry-level office assistants in law offices and government and corporate legal departments. The program provides students with the knowledge, skills, and attitudes necessary for success in legal offices as receptionists and as office assistants and prepares students in the areas of legal office etiquette, word processing, English grammar, and legal document preparation.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins Online

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/LA11](http://www.centralgatech.edu/gainfulemployment/LA11)

	<b>Credit Hours</b>
COMP 1000 Introduction to Computer Literacy	3
ENGL 1010 Fundamentals of English I	3
BUSN 1230 Legal Terminology	3
BUSN 1240 Office Procedures	3
BUSN 1440 Document Production	4
BUSN 1400 Word Processing Applications	4
BUSN 2220 Legal Administrative Procedures	3
ACCT 1100 Financial Accounting I	4
or BUSN 2200 Office Accounting	(4)
BUSN xxxx Business Elective(s)	3

**Business Electives:**

BUSN 1015 Introduction to Medical Insurance	4
BUSN 1100 Introduction to Keyboarding	3
BUSN 1180 Computer Graphics and Design	3

BUSN 1190	Digital Technologies in Business	2	BUSN 1230	Legal Terminology	3
BUSN 1200	Machine Transcription	2	BUSN 1240	Office Procedures	3
BUSN 1210	Electronics Calculators	2	BUSN 1250	Records Management	3
BUSN 1220	Telephone Training	2	BUSN 1300	Introduction to Business	3
BUSN 1250	Records Management	3	BUSN 1310	Introduction to Business Culture	3
BUSN 1300	Introduction to Business	3	BUSN 1320	Business Interaction Skills	3
BUSN 1310	Introduction to Business Culture	3	BUSN 1330	Personal Effectiveness	3
BUSN 1320	Business Interaction Skills	3	BUSN 1340	Customer Service Effectiveness	3
BUSN 1330	Personal Effectiveness	3	BUSN 1400	Word Processing Applications	4
BUSN 1340	Customer Service Effectiveness	3	BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4	BUSN 1420	Database Applications	4
BUSN 1420	Database Applications	4	BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4	BUSN 2160	Electronic Mail Applications	2
BUSN 2160	Electronic Mail Applications	2	BUSN 2170	Web Page Design	2
BUSN 2170	Web Page Design	2	BUSN 2180	Speed and Accuracy Keying	1
BUSN 2180	Speed and Accuracy Keying	1	BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2190	Business Document Proofreading & Editing	3	BUSN 2210	Applied Office Procedures	3
BUSN 2210	Applied Office Procedures	3	BUSN 2220	Legal Administrative Procedures	3
BUSN 2230	Office Management	3	BUSN 2230	Office Management	3
BUSN 2300	Medical Terminology	2	BUSN 2320	Medical Document Processing/Transcription	4
BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3	BUSN 2340	Medical Administrative Procedures	4
BUSN 2320	Medical Document Processing/Transcription	4	BUSN 2350	Electronic Health Records	3
BUSN 2330	Advanced Medical Document Processing/Transcription	4	BUSN 2360	Acute Care Medical Transcription	4
BUSN 2340	Medical Administrative Procedures	4	BUSN 2370	Medical Office Billing/Coding/Insurance	3
BUSN 2350	Electronic Health Records	3		<b>Total Hours</b>	<b>20</b>
BUSN 2360	Acute Care Medical Transcription	4			
<b>BUSN 2370</b>	<b>Medical Office Billing/Coding/Insurance</b>	<b>3</b>			
	<b>Total Hours</b>	<b>30</b>			

**MEDICAL BILLING CLERK (MB21)**

Technical Certificate of Credit

Provides instruction in medical insurance and medical billing for reimbursement purposes.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MB21](http://www.centralgatech.edu/gainfulemployment/MB21)

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
BUSN 1440	Document Production	4
BUSN 2370	Medical Office Billing/Coding/Insurance	3
ALHS 1011	Structure and Function of the Human Body	5
or BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	(3)
ALHS 1090	Medical Terminology for AHS	2
or BUSN 2300	Medical Terminology	(2)
BUSN xxxx	Business Elective(s)	5
<b>Business Electives:</b>		
BUSN 1015	Introduction to Medical Insurance	4
BUSN 1100	Introduction to Keyboarding	3
BUSN 1180	Computer Graphics and Design	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1200	Machine Transcription	2
BUSN 1210	Electronics Calculators	2
BUSN 1220	Telephone Training	2

**MEDICAL FRONT OFFICE ASSISTANT (MF21)**

Technical Certificate of Credit

Provides the 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 areas. Technical courses apply to the degree or diploma program in office technology.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MF21](http://www.centralgatech.edu/gainfulemployment/MF21)

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 2340	Medical Administrative Procedures	4
ALHS 1090	Medical Terminology for AHS	2
or BUSN 2300	Medical Terminology	(2)
BUSN xxxx	Business Elective(s)	6
<b>Business Electives:</b>		
BUSN 1015	Introduction to Medical Insurance	4
BUSN 1100	Introduction to Keyboarding	3
BUSN 1180	Computer Graphics and Design	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1200	Machine Transcription	2
BUSN 1210	Electronics Calculators	2
BUSN 1220	Telephone Training	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3

BUSN 1250	Records Management	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1320	Business Interaction Skills	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2170	Web Page Design	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2210	Applied Office Procedures	3
BUSN 2220	Legal Administrative Procedures	3
BUSN 2230	Office Management	3
BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3
BUSN 2320	Medical Document Processing/Transcription	4
BUSN 2330	Advanced Medical Document Processing/Transcription	4
BUSN 2340	Medical Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2360	Acute Care Medical Transcription	4
BUSN 2370	Medical Office Billing/Coding/Insurance	3
<b>Total Hours</b>		<b>22</b>

BUSN 1190	Digital Technologies in Business	2
BUSN 1200	Machine Transcription	2
BUSN 1210	Electronics Calculators	2
BUSN 1220	Telephone Training	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3
BUSN 1250	Records Management	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1320	Business Interaction Skills	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2170	Web Page Design	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2210	Applied Office Procedures	3
BUSN 2220	Legal Administrative Procedures	3
BUSN 2230	Office Management	3
BUSN 2340	Medical Administrative Procedures	4
BUSN 2350	Electronic Health Records	3
BUSN 2360	Acute Care Medical Transcription	4
BUSN 2370	Medical Office Billing/Coding/Insurance	3
<b>Total Hours</b>		<b>30</b>

**MEDICAL LANGUAGE SPECIALIST (MLS1)**

Technical Certificate of Credit

Includes instruction in transcription, proofreading, and report analysis while applying medical terminology and computer application skills.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins   Online

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MLS1](http://www.centralgatech.edu/gainfulemployment/MLS1)

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
ENGL 1010	Fundamentals of English I	3
BUSN 1440	Document Production	4
BUSN 2320	Medical Document Processing/Transcription	4
BUSN 2330	Advanced Medical Document Processing/Transcription	4
BUSN xxxx	Business Elective(s)	4
MAST 1120	Human Diseases	3
ALHS 1010	Introduction to Anatomy & Physiology	4
or ALHS 1011	Structure and Function of the Human Body	5
or BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3
ALHS 1090	Medical Terminology for AHS	2
or BUSN 2300	Medical Terminology	2

**Business Electives:**

BUSN 1015	Introduction to Medical Insurance	4
BUSN 1100	Introduction to Keyboarding	3
BUSN 1180	Computer Graphics and Design	3

**MICROSOFT OFFICE APPLICATIONS PROFESSIONAL (MF41)**

Technical Certificate of Credit

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 to prepare students for Microsoft Certified Application Specialist (MCAS) certification.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MF41](http://www.centralgatech.edu/gainfulemployment/MF41)

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN xxxx	Business Elective(s)	3

**Business Electives:**

BUSN 1015	Introduction to Medical Insurance	4
BUSN 1100	Introduction to Keyboarding	3
BUSN 1180	Computer Graphics and Design	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1200	Machine Transcription	2

BUSN 1210	Electronics Calculators	2	BUSN 1420	Database Applications	4
BUSN 1220	Telephone Training	2	BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1230	Legal Terminology	3	BUSN 2160	Electronic Mail Applications	2
BUSN 1240	Office Procedures	3	BUSN 2170	Web Page Design	2
BUSN 1250	Records Management	3	BUSN 2180	Speed and Accuracy Keying	1
BUSN 1300	Introduction to Business	3	BUSN 2190	Business Document Proofreading & Editing	3
BUSN 1310	Introduction to Business Culture	3	BUSN 2210	Applied Office Procedures	3
BUSN 1320	Business Interaction Skills	3	BUSN 2220	Legal Administrative Procedures	3
BUSN 1330	Personal Effectiveness	3	BUSN 2230	Office Management	3
BUSN 1340	Customer Service Effectiveness	3	BUSN 2300	Medical Terminology	2
BUSN 1440	Document Production	4	BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3
BUSN 2160	Electronic Mail Applications	2	BUSN 2320	Medical Document Processing/Transcription	4
BUSN 2170	Web Page Design	2	BUSN 2340	Medical Administrative Procedures	4
BUSN 2180	Speed and Accuracy Keying	1	BUSN 2370	Medical Office Billing/Coding/Insurance	3
BUSN 2190	Business Document Proofreading & Editing	3		<b>Total Hours</b>	<b>14</b>
BUSN 2210	Applied Office Procedures	3			
BUSN 2220	Legal Administrative Procedures	3			
BUSN 2230	Office Management	3			
BUSN 2300	Medical Terminology	2			
BUSN 2310	Anatomy and Terminology for the Medical Administrative Assistant	3			
BUSN 2320	Medical Document Processing/Transcription	4			
BUSN 2340	Medical Administrative Procedures	4			
BUSN 2350	Electronic Health Records	3			
BUSN 2370	Medical Office Billing/Coding/Insurance	3			
	<b>Total Hours</b>	<b>22</b>			

## MICROSOFT WORD APPLICATION PROFESSIONAL (MWA1)

Technical Certificate of Credit

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.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
BUSN xxxx	Business Elective(s)	3

### Business Electives:

BUSN 1015	Introduction to Medical Insurance	4
BUSN 1100	Introduction to Keyboarding	3
BUSN 1180	Computer Graphics and Design	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1200	Machine Transcription	2
BUSN 1210	Electronics Calculators	2
BUSN 1220	Telephone Training	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3
BUSN 1250	Records Management	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1320	Business Interaction Skills	3
BUSN 1330	Personal Effectiveness	3
BUSN 1340	Customer Service Effectiveness	3
BUSN 1410	Spreadsheet Concepts and Applications	4

# BUSINESS MANAGEMENT

## BUSINESS MANAGEMENT (MD13)

Associate Degree

Prepares students for entry into management and supervisory occupations in a variety of businesses and industries. Learning opportunities will introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement in management.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins

### General Education Core Courses

**Credit Hours**  
**18**

#### Area I - Language Arts/Communication

ENGL 1101 Composition and Rhetoric 3

#### Area II - Social/Behavioral Sciences

XXXX xxxx Social/Behavioral Sciences Elective 3

#### Area III - Natural Sciences/Mathematics

MATH 1103 Quantitative Skills and Reasoning 3  
 or MATH 1101 Mathematical Modeling (3)  
 or MATH 1111 College Algebra (3)  
 or MATH 1127 Introduction to Statistics (3)

#### Area IV - Humanities/Fine Arts

XXXX xxxx Humanities/Fine Arts Elective 3

#### Program-Specific Requirement

XXXX xxxx General Education Core Elective (Areas I - IV) 3

### Occupational Courses

**33**

COMP 1000 Introduction to Computer Literacy 3  
 ACCT 1100 Financial Accounting I 4  
 or MGMT 1135 Managerial Accounting and Finance (3)

MGMT 1110 Employment Rules and Regulations 3  
 or MKTG 1130 Business Regulations and Compliance (3)

MGMT 1100 Principles of Management 3  
 MGMT 1105 Organizational Behavior 3  
 MGMT 1120 Introduction to Business 3  
 MGMT 1115 Leadership 3  
 MGMT 1125 Business Ethics 3  
 MGMT 2115 Human Resource Management 3  
 MGMT 2125 Performance Management 3  
 MGMT 2215 Team Project 3

### Choose one specialization:

General Management Specialization (81G3) 12  
 MGMT xxxx Specialization Elective(s) 6

### Specialization Electives:

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  
 ACCT 2120 Business Tax Accounting 3  
 ACCT 2135 Introduction to Governmental and

Nonprofit Accounting 3  
 ACCT 2140 Legal Environment of Business 3  
 ACCT 2145 Personal Finance 3  
 ACCT 2150 Principles of Auditing 3  
 BAFN 1100 Introduction to Banking and Finance 3  
 BAFN 1110 Money and Banking 3  
 BAFN 1115 Personal Financial Planning 3  
 BAFN 2200 Finance 3  
 BAFN 2205 Real Estate Finance 3  
 BAFN 2210 Contemporary Bank Management 3  
 BAFN 2215 Investments 3  
 BUSN 1100 Introduction to Keyboarding 3  
 BUSN 1230 Legal Terminology 3  
 BUSN 1300 Introduction to Business 3  
 BUSN 1310 Introduction to Business Culture 3  
 BUSN 1420 Database Applications 4  
 BUSN 1440 Document Production 4  
 BUSN 2200 Office Accounting 4  
 BUSN 2230 Office Management 3  
 HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management 3  
 MKTG 1100 Principles of Marketing 3  
 MKTG 1130 Business Regulations and Compliance 3  
 MKTG 1370 Consumer Behavior 3  
 MKTG 2060 Marketing Channels 3  
 MKTG 2090 Marketing Research 3  
 MKTG 2210 Entrepreneurship 6  
 MKTG 2290 Marketing Internship/Practicum 3

Human Resource Management Specialization (82H3) 12  
 MGMT 2120 Labor Management Relations 3  
 MGMT 2130 Employee Training and Development 3  
 MGMT 2205 Service Sector Management 3  
 or MGMT 2210 Project Management (3)

### Choose one of the following guided electives:

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  
 ACCT 2120 Business Tax Accounting 3  
 ACCT 2135 Introduction to Governmental and Nonprofit Accounting 3  
 ACCT 2140 Legal Environment of Business 3  
 ACCT 2145 Personal Finance 3  
 ACCT 2150 Principles of Auditing 3  
 BAFN 1100 Introduction to Banking and Finance 3  
 BAFN 1110 Money and Banking 3  
 BAFN 1115 Personal Financial Planning 3  
 BAFN 2200 Finance 3  
 BAFN 2205 Real Estate Finance 3  
 BAFN 2210 Contemporary Bank Management 3  
 BAFN 2215 Investments 3  
 BUSN 1100 Introduction to Keyboarding (Required) 3  
 BUSN 1230 Legal Terminology 3  
 BUSN 1300 Introduction to Business 3  
 BUSN 1310 Introduction to Business Culture 3  
 BUSN 1420 Database Applications 4  
 BUSN 1440 Document Production 4  
 BUSN 2200 Office Accounting 4  
 BUSN 2230 Office Management 3  
 HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management 3  
 MKTG 1100 Principles of Marketing 3  
 MKTG 1130 Business Regulations and Compliance 3

MKTG 1370	Consumer Behavior	3	ACCT 2000	Managerial Accounting	3
MKTG 2060	Marketing Channels	3	ACCT 1115	Computerized Accounting	3
MKTG 2090	Marketing Research	3	ACCT 1125	Individual Tax Accounting	3
MKTG 2210	Entrepreneurship	6	ACCT 1130	Payroll Accounting	3
MKTG 2290	Marketing Internship/Practicum	3	ACCT 2120	Business Tax Accounting	3
			ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
<i>Logistics Specialization (86L3)</i>		12	ACCT 2140	Legal Environment of Business	3
LOGI 1000	Business Logistics	3	ACCT 2145	Personal Finance	3
LOGI 1010	Purchasing	3	ACCT 2150	Principles of Auditing	3
LOGI 1020	Materials Management	3	BAFN 1100	Introduction to Banking and Finance	3
LOGI 1030	Product Lifecycle Management	3	BAFN 1110	Money and Banking	3
			BAFN 1115	Personal Financial Planning	3
<i>Operations Management Specialization (83P3)</i>		12	BAFN 2200	Finance	3
MGMT 2130	Employee Training and Development	3	BAFN 2205	Real Estate Finance	3
MGMT 2200	Production/Operations Management	3	BAFN 2210	Contemporary Bank Management	3
MGMT 2210	Project Management	3	BAFN 2215	Investments	3
			BUSN 1100	Introduction to Keyboarding (Required)	3
<i>Choose one of the following guided electives:</i>			BUSN 1230	Legal Terminology	3
ACCT 1105	Financial Accounting II	4	BUSN 1300	Introduction to Business	3
ACCT 2000	Managerial Accounting	3	BUSN 1310	Introduction to Business Culture	3
ACCT 1115	Computerized Accounting	3	BUSN 1420	Database Applications	4
ACCT 1125	Individual Tax Accounting	3	BUSN 1440	Document Production	4
ACCT 1130	Payroll Accounting	3	BUSN 2200	Office Accounting	4
ACCT 2120	Business Tax Accounting	3	BUSN 2230	Office Management	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3	HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3
ACCT 2140	Legal Environment of Business	3	MKTG 1100	Principles of Marketing	3
ACCT 2145	Personal Finance	3	MKTG 1130	Business Regulations and Compliance	3
ACCT 2150	Principles of Auditing	3	MKTG 1370	Consumer Behavior	3
BAFN 1100	Introduction to Banking and Finance	3	MKTG 2060	Marketing Channels	3
BAFN 1110	Money and Banking	3	MKTG 2090	Marketing Research	3
BAFN 1115	Personal Financial Planning	3	MKTG 2210	Entrepreneurship	6
BAFN 2200	Finance	3	MKTG 2290	Marketing Internship/Practicum	3
BAFN 2205	Real Estate Finance	3			
BAFN 2210	Contemporary Bank Management	3	<i>Small Business Management Specialization (85S3)</i>		12
BAFN 2215	Investments	3	MGMT 2140	Retail Management	3
BUSN 1100	Introduction to Keyboarding (Required)	3	MGMT 2145	Business Plan Development	3
BUSN 1230	Legal Terminology	3	MGMT 2150	Small Business Management	3
BUSN 1300	Introduction to Business	3			
BUSN 1310	Introduction to Business Culture	3	<i>Choose one of the following guided electives:</i>		
BUSN 1420	Database Applications	4	ACCT 1105	Financial Accounting II	4
BUSN 1440	Document Production	4	ACCT 2000	Managerial Accounting	3
BUSN 2200	Office Accounting	4	ACCT 1115	Computerized Accounting	3
BUSN 2230	Office Management	3	ACCT 1125	Individual Tax Accounting	3
HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3	ACCT 1130	Payroll Accounting	3
MKTG 1100	Principles of Marketing	3	ACCT 2120	Business Tax Accounting	3
MKTG 1130	Business Regulations and Compliance	3	ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
MKTG 1370	Consumer Behavior	3	ACCT 2140	Legal Environment of Business	3
MKTG 2060	Marketing Channels	3	ACCT 2145	Personal Finance	3
MKTG 2090	Marketing Research	3	ACCT 2150	Principles of Auditing	3
MKTG 2210	Entrepreneurship	6	BAFN 1100	Introduction to Banking and Finance	3
MKTG 2290	Marketing Internship/Practicum	3	BAFN 1110	Money and Banking	3
			BAFN 1115	Personal Financial Planning	3
<i>Property Management Specialization (87P3)</i>		12	BAFN 2200	Finance	3
AIPM 1101	Apartment Industry Foundations	3	BAFN 2205	Real Estate Finance	3
AIPM 1115	Apartment Industry Internship	3	BAFN 2210	Contemporary Bank Management	3
MGMT 2120	Labor Management Relations	3	BAFN 2215	Investments	3
MKTG 1130	Business Regulations and Compliance	3	BUSN 1100	Introduction to Keyboarding (Required)	3
			BUSN 1230	Legal Terminology	3
<i>Service Sector Management Specialization (84S3)</i>		12	BUSN 1300	Introduction to Business	3
MGMT 2130	Employee Training and Development	3	BUSN 1420	Database Applications	4
MGMT 2140	Retail Management	3	BUSN 1440	Document Production	4
MGMT 2205	Service Sector Management	3	BUSN 1310	Introduction to Business Culture	3
			BUSN 2200	Office Accounting	4
<i>Choose one of the following guided electives:</i>			BUSN 2230	Office Management	3
ACCT 1105	Financial Accounting II	4			

HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2090	Marketing Research	3
MKTG 2210	Entrepreneurship	6
MKTG 2290	Marketing Internship/Practicum	3
<b>Total Hours</b>		<b>63</b>

## BUSINESS MANAGEMENT (MD12)

### Diploma

Prepares students for entry into management positions in a variety of businesses and industries. Learning opportunities will introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement in management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/MD12](http://www.centralgatech.edu/gainfulemployment/MD12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Math	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	(3)
<b>Occupational Courses</b>	<b>39</b>
COMP 1000 Introduction to Computer Literacy	3
ACCT 1100 Financial Accounting I	4
or MGMT 1135 Managerial Accounting and Finance	(3)
MGMT 1110 Employment Rules and Regulations	3
or MKTG 1130 Business Regulations and Compliance	(3)
MGMT 1100 Principles of Management	3
MGMT 1105 Organizational Behavior	3
MGMT 1115 Leadership	3
MGMT 1120 Introduction to Business	3
MGMT 1125 Business Ethics	3
MGMT 2115 Human Resource Management	3
MGMT 2125 Performance Management	3
MGMT 2215 Team Project	3
<i>Choose two of the following guided electives (Advisor Approval):</i>	
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
ACCT 2120 Business Tax Accounting	3
ACCT 2135 Introduction to Governmental and	3

Nonprofit Accounting	3
ACCT 2140 Legal Environment of Business	3
ACCT 2145 Personal Finance	3
ACCT 2150 Principles of Auditing	3
BAFN 1100 Introduction to Banking and Finance	3
BAFN 1110 Money and Banking	3
BAFN 1115 Personal Financial Planning	3
BAFN 2200 Finance	3
BAFN 2205 Real Estate Finance	3
BAFN 2210 Contemporary Bank Management	3
BAFN 2215 Investments	3
BUSN 1100 Introduction to Keyboarding (Required)	3
BUSN 1230 Legal Terminology	3
BUSN 1300 Introduction to Business	3
BUSN 1310 Introduction to Business Culture	3
BUSN 1410 Spreadsheet Concepts and Applications	4
BUSN 1420 Database Applications	4
BUSN 1440 Document Production	4
BUSN 2200 Office Accounting	4
BUSN 2230 Office Management	3
HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management	3
MGMT 2140 Retail Management	3
MGMT 2150 Small Business Management	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3
MKTG 1370 Consumer Behavior	3
MKTG 2060 Marketing Channels	3
MKTG 2090 Marketing Research	3
MKTG 2210 Entrepreneurship	6
MKTG 2290 Marketing Internship/Practicum	3
<b>Total Hours 47</b>	

## HUMAN RESOURCE MANAGEMENT SPECIALIST (HRM1)

### Technical Certificate of Credit

Prepares individuals to perform human resources functions in the human resources department in most companies. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HRM1](http://www.centralgatech.edu/gainfulemployment/HRM1)

	<b>Credit Hours</b>
MGMT 1105 Organizational Behavior	3
MGMT 2115 Human Resource Management	3
MGMT 2125 Performance Management	3
MGMT 2130 Employee Training and Development	3
MGMT 1110 Employment Rules and Regulations	3
or MKTG 1130 Business Regulations and Compliance	(3)
or MGMT 2120 Labor Management Relations	(3)
XXXX xxxx Guided Elective(s)	3
<b>Guided Electives:</b>	
MGMT 1100 Principles of Management	3
MGMT 1115 Leadership	3
MGMT 1120 Introduction to Business	3



MGMT 1125 Business Ethics	3
MGMT 1135 Managerial Accounting and Finance	3
MGMT 2135 Management Communication Techniques	3
MGMT 2140 Retail Management	3
MGMT 2145 Business Plan Development	3
MGMT 2150 Small Business Management	3
MGMT 2200 Production/Operations Management	3
MGMT 2205 Service Sector Management	3
MGMT 2210 Project Management	3
MGMT 2215 Team Project	3
MGMT 2220 Management and Supervision Occupation Based Instruction	3
<b>Total Hours</b>	<b>18</b>

### MANAGEMENT AND LEADERSHIP SPECIALIST (MAL1)

Technical Certificate of Credit

Prepares individuals to become supervisors and leaders in business, commercial or manufacturing facilities. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/MAL1](http://www.centralgatech.edu/gainfulemployment/MAL1)

	Credit Hours
COMP 1000 Introduction to Computer Literacy	3
MGMT 1100 Principles of Management	3
MGMT 1115 Leadership	3
MGMT 2125 Performance Management	3
MGMT 2130 Employee Training and Development	3
MGMT 1110 Employment Rules and Regulations	3
or MKTG 1130 Business Regulations and Compliance	(3)
or MGMT 2120 Labor Management Relations	(3)
<b>Total Hours</b>	<b>18</b>

### SERVICE SECTOR MANAGEMENT SPECIALIST (SSM1)

Technical Certificate of Credit

Prepares individuals to become supervisors in business and service related companies. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/SSM1](http://www.centralgatech.edu/gainfulemployment/SSM1)

	Credit Hours
COMP 1000 Introduction to Computer Literacy	3
MGMT 1100 Principles of Management	3

MGMT 2125 Performance Management	3
MGMT 2130 Employee Training and Development	3
MGMT 2205 Service Sector Management	3
MGMT 2140 Retail Management	3
or MGMT 2210 Project Management	(3)
<b>Total Hours</b>	<b>18</b>

### SMALL BUSINESS MANAGEMENT SPECIALIST (SB41)

Technical Certificate of Credit

Prepares individuals to manage and direct day-to-day functions of a variety of small businesses. Learning opportunities will introduce, develop and reinforce a student's knowledge, skills and attitudes required for job acquisition, retention and success in small business management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/SB41](http://www.centralgatech.edu/gainfulemployment/SB41)

	Credit Hours
ACCT 1100 Financial Accounting I	4
COMP 1000 Introduction to Computer Literacy	3
MGMT 2125 Performance Management	3
MGMT 2140 Retail Management	3
MGMT 2150 Small Business Management	3
MGMT 1110 Employment Rules and Regulations	3
or MKTG 1130 Business Regulations and Compliance	(3)
or MGMT 2120 Labor Management Relations	(3)
<b>Total Hours</b>	<b>19</b>

### TECHNICAL MANAGEMENT SPECIALIST (TMS1)

Technical Certificate of Credit

Builds upon a student's previously achieved degree, diploma, or technical certificate 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/TMS1](http://www.centralgatech.edu/gainfulemployment/TMS1)

	Credit Hours
COMP 1000 Introduction to Computer Literacy	3
MGMT 1100 Principles of Management	3
MGMT 2115 Human Resource Management	3
XXXX xxxx Guided Elective(s)	12
MGMT 1110 Employment Rules and Regulations	3
or MKTG 1130 Business Regulations and Compliance	(3)
or MGMT 2120 Labor Management Relations	(3)

#### Guided Electives:

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
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
BAFN 1100	Introduction to Banking and Finance	3
BAFN 1110	Money and Banking	3
BAFN 1115	Personal Financial Planning	3
BAFN 2200	Finance	3
BAFN 2205	Real Estate Finance	3
BAFN 2215	Investments	3
HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
MKTG 2090	Marketing Research	3
MKTG 2210	Entrepreneurship	6
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
	<b>Total Hours</b>	<b>24</b>

# COMPUTER PROGRAMMING

## COMPUTER PROGRAMMING (CP23)

Associate Degree

Provides students with an understanding of the concepts, principles, and techniques required in writing computer software. Those interested in this program should be highly motivated individuals who are interested in becoming an information technology professional.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

### General Education Core Courses

*Area I - English/Humanities/Fine Arts*  
ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*  
XXXX xxxx Social/Behavioral Sciences Elective 3

*Area III - Natural Sciences/Mathematics*  
MATH 1103 Quantitative Skills and Reasoning 3  
or MATH 1101 Mathematical Modeling (3)  
or MATH 1111 College Algebra (3)

*Area IV - Humanities/Fine Arts*  
XXXX xxxx Humanities/Fine Arts Elective 3

Program-Specific Requirement  
XXXX xxxx General Education Core Elective (Areas I - IV) 3

### Occupational Courses 50

COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1220	Structured Query Language (SQL)	4
CIST 1305	Program Design and Development	3
CIST 1510	Web Development I	3
CIST 2921	IT Analysis, Design, and Project Management	4
ACCT 1100	Financial Accounting I	4
or BUSN 1300	Introduction to Business	(3)
or MGMT 1120	Introduction to Business	(3)
CIST xxxx	CIST Elective(s)	6

Programming Language Courses (20 hours required with at least two Tier II courses)

#### Programming Courses Tier I

CIST 2311	Visual Basic Programming I	4
CIST 2341	C# Programming I	4
CIST 2351	PHP Programming	4
CIST 2361	C++ Programming I	4
CIST 2371	Java Programming I	4
CIST 2381	Mobile Application Development	4
CIST 2580	Interactive & Social Apps Integration	4

#### Programming Courses Tier II

CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4

CIST 2352	PHP Programming II	4
CIST 2362	C++ Programming II	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4

### CIST Electives:

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1141	Network + Preparation	4
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1401	Computer Networking Fundamentals	4
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4

CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>65</b>

**COMPUTER PROGRAMMING (CP24)**

Diploma

Provides students with an understanding of the concepts, principles, and techniques required in computer information processing. Those interested in this program should be highly motivated individuals who are interested in becoming an information technology professional.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/CP24](http://www.centralgatech.edu/gainfulemployment/CP24)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>47</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1220 Structured Query Language	4
CIST 1305 Program Design and Development	3
CIST 1510 Web Development I	3
CIST 2921 IT Analysis, Design, and Project Management	4
CIST xxxx CIST Elective(s)	3

**Programming Language Courses (20 hours required with at least two Tier II courses)***Programming Courses Tier I*

CIST 2311	Visual Basic Programming I	4
CIST 2341	C# Programming I	4
CIST 2351	PHP Programming	4
CIST 2361	C++ Programming I	4
CIST 2371	Java Programming I	4
CIST 2381	Mobile Application Development	4
CIST 2580	Interactive & Social Apps Integration	4

*Programming Courses Tier II*

CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2352	PHP Programming II	4
CIST 2362	C++ Programming II	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4

**CIST Electives:**

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1141	Network + Preparation	4
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1401	Computer Networking Fundamentals	4
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4

CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>52</b>

## COMPUTER SUPPORT SPECIALIST

### COMPUTER SUPPORT SPECIALIST (CS23)

Associate Degree

Provides 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>47</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 1305 Program Design and Development	3
CIST 1601 Information Security Fundamentals	3
CIST 1401 Computer Networking Fundamentals	4
or CIST 2451 Introduction to Networks - Cisco	(4)
CIST 1220 Structured Query Language	4
or CIST 2129 Comprehensive Database Techniques	(4)
CIST 2127 Comprehensive Word Processing Techniques	3
or CIST 2128 Comprehensive Spreadsheet Techniques	(3)
CIST 2921 IT Analysis, Design, and Project Management	4
CIST xxxx CIST Elective(s)	12
<b>CIST Electives:</b>	
CIST 1101 Working with Microsoft Windows	3
CIST 1102 Keyboarding	3
CIST 1141 Network + Preparation	4

CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1401	Computer Networking Fundamentals	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	IMicrosoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3

CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>62</b>

## COMPUTER SUPPORT SPECIALIST (CS14)

### Diploma

Provides 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CS14](http://www.centralgatech.edu/gainfulemployment/CS14)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>47</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 1305 Program Design and Development	3
CIST 1601 Information Security Fundamentals	3
CIST 1220 Structured Query Language	4
or CIST 2129 Comprehensive Database Techniques	(4)
CIST 1401 Computer Networking Fundamentals	4
or CIST 2441 Cisco Networking for Home and Small Business	4
or CIST 2451 Introduction to Networks - Cisco	4
CIST 2127 Comprehensive Word Processing Techniques	3
or CIST 2128 Comprehensive Spreadsheet Techniques	3

CIST 2921	IT Analysis, Design, and Project Management	4
CIST xxxx	CIST Elective(s)	12

#### CIST Electives:

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1141	Network + Preparation	4
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1401	Computer Networking Fundamentals	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4

CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
	<b>Total Hours</b>	<b>55</b>



## DESIGN AND MEDIA PRODUCTION

### DESIGN AND MEDIA PRODUCTION TECHNOLOGY (DAM3)

Associate Degree

Prepares students for employment in a variety of media production industries. This program of study emphasizes hands-on experience in the specialized area of post production technology.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>19</b>
DMPT 1000 Introduction to Design	4
DMPT 1005 Vector Graphics	4
DMPT 1010 Raster Imaging	4
DMPT 2930 Exit Review	4
DMPT 1055 Introduction to Media Technology	4
or COMP 1000 Introduction to Computer Literacy	(3)
or CIST 1101 Working with Microsoft Windows	(3)
<b>Post Production Specialization (8MG3)</b>	<b>27</b>
DMPT 2600 Basic Video Editing	4
DMPT 2605 Introduction to Video Compositing and Broadcast Animation	4
XXXX xxxx Occupationally-Related Elective(s)	19
<b>Occupationally-Related Electives:</b>	
DMPT 1600 Introduction to Video Production	4
DMPT 2330 Introduction to Content Management Systems	4
DMPT 2400 Basic 3D Modeling and Animation	4
DMPT 2610 Intermediate Video Compositing and Broadcast Animation	4
DMPT 2615 Intermediate Video Editing	4
DMPT 2640 Color Grading	4
DMPT 2650 Visual Effects	4
DMPT 2660 Special Projects	4
DMPT 2905 Practicum/Internship II	4
MKTG 1190 Integrated Marketing Communication	3
MKTG 1270 Visual Merchandising	3
<b>Total Hours</b>	<b>61</b>

### DESIGN AND MEDIA PRODUCTION TECHNOLOGY (DEM2)

Diploma

Prepares students for employment in a variety of media production industries. This program of study emphasizes hands-on experience in the specialized area of post production technology.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/DEM2](http://www.centralgatech.edu/gainfulemployment/DEM2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Math	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	(3)
<b>Occupational Courses</b>	<b>19</b>
DMPT 1000 Introduction to Design	4
DMPT 1005 Vector Graphics	4
DMPT 1010 Raster Imaging	4
DMPT 2930 Exit Review	4
DMPT 1055 Introduction to Media Technology	4
or COMP 1000 Introduction to Computer Literacy	3
or CIST 1101 Working with Microsoft Windows	3
<b>Post Production Specialization (8MG2)</b>	<b>19</b>
DMPT 2600 Basic Video Editing	4
DMPT 2605 Introduction to Video Compositing and Broadcast Animation	4
<i>Choose a minimum of 11 hours from the courses below:</i>	
DMPT 1600 Introduction to Video Production	4
DMPT 2400 Basic 3D Modeling and Animation	4
DMPT 2610 Intermediate Video Compositing and Broadcast Animation	4
DMPT 2615 Intermediate Video Editing	4
DMPT 2640 Color Grading	4
DMPT 2650 Visual Effects	4
DMPT 2660 Special Projects	4
DMPT 2905 Practicum/Internship II	4
MKTG 1190 Integrated Marketing Communication	3
MKTG 1270 Visual Merchandising	3
<b>Total Hours</b>	<b>46</b>

**DESIGN AND MEDIA PRODUCTION SPECIALIST (DAM1)**

Technical Certificate of Credit

Prepares students with basic design and media production skills, including those in vector graphics and raster imaging. Additionally, the program provides opportunities to upgrade present knowledge or skills.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   GDC

DMPT 2660	Special Projects	4
DMPT 2905	Practicum/Internship II	4
MKTG 1190	Integrated Marketing Communication	3
MKTG 1270	Visual Merchandising	3
<b>Total Hours</b>		<b>31</b>

	<b>Credit Hours</b>
DMPT 1000 Introduction to Design	4
DMPT 1005 Vector Graphics	4
DMPT 1010 Raster Imaging	4
DMPT 1055 Introduction to Media Technology	4
or CIST 1101 Working with Microsoft Windows	(3)
or COMP 1000 Introduction to Computer Literacy	(3)
<b>Minimum Total Hours</b>	<b>15</b>

**MOTION GRAPHICS ASSISTANT (MG21)**

Technical Certificate of Credit

Combines the specialist skills of pre-production, production and an emphasis on post-production. Motion graphics are graphics that use video and/or animation technology to create the illusion of motion or a transforming appearance. Students develop valuable industry standard techniques and become adept with using various software applications to integrate 2D and 3D design elements with live footage, audio and visual effects artistry.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/MG21](http://www.centralgatech.edu/gainfulemployment/MG21)

	<b>Credit Hours</b>
DMPT 1000 Introduction to Design	6
DMPT 1005 Vector Graphics	4
DMPT 1010 Raster Imaging	4
DMPT 2600 Basic Video Editing	4
DMPT 2605 Introduction to Video Compositing and Broadcast Animation	4
DMPT xxxx DMPT Elective(s)	8
DMPT 1055 Introduction to Media Technology	4
or CIST 1101 Working with Microsoft Windows	(3)
or COMP 1000 Introduction to Computer Literacy	(3)

**DMPT Electives:**

DMPT 1600 Introduction to Video Production	4
DMPT 2330 Introduction to Content Management Systems	4
DMPT 2400 Basic 3D Modeling and Animation	4
DMPT 2610 Intermediate Video Compositing and Broadcast Animation	4
DMPT 2615 Intermediate Video Editing	4
DMPT 2640 Color Grading	4
DMPT 2650 Visual Effects	4

# HOTEL/RESTAURANT/ TOURISM MANAGEMENT

## HOTEL/RESTAURANT/TOURISM MANAGEMENT (HM13)

Associate Degree  
Effective Spring 2018 (201814)

Prepares students for employment in a variety of positions in today's hotel, restaurant, and tourism management fields. This program provides learning opportunities which 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 hotel, restaurant, and tourism management.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management	3
HRTM 1110 Travel Industry and Travel Geography - Americas	3
or HRTM 1115 Travel Industry and Travel Geography - International	(3)
HRTM 1140 Hotel Operations Management	3
HRTM 1150 Event Planning	3
HRTM 1160 Food and Beverage Management	3
HRTM 1201 Hospitality Marketing	3
HRTM 1210 Hospitality Law	3
HRTM 1220 Supervision and Leadership in the Hospitality Industry	3
HRTM 1230 Internship	3
XXXX xxxx Occupationally-Related Electives	15
<b>Occupationally-Related Electives:</b>	
HRTM 1105 Tourism in Georgia	3
HRTM 1115 Travel Industry and Travel Geography - International	3
HRTM 1120 Tour and Cruise Management	3
HRTM 1130 Business Etiquette	3

ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1110	Employment Rules and Regulations	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 1135	Managerial Accounting and Finance	3
MGMT 2115	Human Resource Management	3
MGMT 2120	Labor Management Relations	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2135	Management Communication Techniques	3
MGMT 2140	Retail Management	3
MGMT 2145	Business Plan Development	3
MGMT 2150	Small Business Management	3
MGMT 2200	Production/Operations Management	3
MGMT 2205	Service Sector Management	3
MGMT 2210	Project Management	3
MGMT 2215	Team Project	3
SCMA 1001	Inventory Control Procedures	3
SCMA 1002	Purchasing	3
SCMA 1004	Quality Improvement Concepts	3
SCMA 1005	Distribution Principles	3
SCMA 1006	Supply Chain Management Principles	6
SCMA 1010	Manufacturing Planning and Control / JIT	5
SCMA 1050	Traffic Management	3
SCMA 1051	Warehouse Operations	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 1210	Services Marketing	3
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 1370	Consumer Behavior	3
MKTG 2000	Global Marketing	3
MKTG 2010	Small Business Management	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
MKTG 2080	Regulations and Compliance in Sports	3
MKTG 2090	Marketing Research	3
MKTG 2180	Principles of Sports Marketing	3
MKTG 2210	Entrepreneurship	6
MKTG 2280	Sports Management	3
MKTG 2300	Marketing Management	3
MKTG 2500	Exploring Social Media	3
MKTG 2550	Analyzing Social Media	3
BUSN 1100	Introduction to Keyboarding	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1210	Electronics Calculators	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1300	Introduction to Business	3

BUSN 1310	Introduction to Business Culture	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2200	Office Accounting	4
BUSN 2210	Applied Office Procedures	3
BUSN 2220	Legal Administrative Procedures	3
BUSN 2370	Medical Office Billing/Coding/Insurance	3
<b>Total Hours</b>		<b>60</b>

### HOTEL/RESTAURANT/TOURISM MANAGEMENT (HM13)

Associate Degree  
Prior to Spring 2018 (201814)

Prepares students for employment in a variety of positions in today's hotel, restaurant, and tourism management fields. This program provides learning opportunities which 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 hotel, restaurant, and tourism management.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management	3
HRTM 1110 Travel Industry and Travel Geography	3
HRTM 1140 Hotel Operations Management	3
HRTM 1150 Event Planning	3
HRTM 1160 Food and Beverage Management	3
HRTM 1201 Hospitality Marketing	3
HRTM 1210 Hospitality Law	3

HRTM 1220	Supervision and Leadership in the Hospitality Industry	3
HRTM 1230	Internship	3
XXXX xxxx	Occupationally-Related Electives	15

#### Occupationally-Related Electives:

HRTM 1105	Tourism in Georgia	3
HRTM 1115	Travel Industry and Travel Geography - International	3
HRTM 1120	Tour and Cruise Management	3
HRTM 1130	Business Etiquette	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1110	Employment Rules and Regulations	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 1135	Managerial Accounting and Finance	3
MGMT 2115	Human Resource Management	3
MGMT 2120	Labor Management Relations	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2135	Management Communication Techniques	3
MGMT 2140	Retail Management	3
MGMT 2145	Business Plan Development	3
MGMT 2150	Small Business Management	3
MGMT 2200	Production/Operations Management	3
MGMT 2205	Service Sector Management	3
MGMT 2210	Project Management	3
MGMT 2215	Team Project	3
SCMA 1001	Inventory Control Procedures	3
SCMA 1002	Purchasing	3
SCMA 1004	Quality Improvement Concepts	3
SCMA 1005	Distribution Principles	3
SCMA 1006	Supply Chain Management Principles	6
SCMA 1010	Manufacturing Planning and Control / JIT	5
SCMA 1050	Traffic Management	3
SCMA 1051	Warehouse Operations	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 1210	Services Marketing	3
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 1370	Consumer Behavior	3
MKTG 2000	Global Marketing	3
MKTG 2010	Small Business Management	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
MKTG 2080	Regulations and Compliance in Sports	3
MKTG 2090	Marketing Research	3
MKTG 2180	Principles of Sports Marketing	3
MKTG 2210	Entrepreneurship	6
MKTG 2280	Sports Management	3

MKTG 2300	Marketing Management	3	HRTM 1150	Event Planning	3
MKTG 2500	Exploring Social Media	3	HRTM 1160	Food and Beverage Management	3
MKTG 2550	Analyzing Social Media	3	HRTM 1201	Hospitality Marketing	3
BUSN 1100	Introduction to Keyboarding	3	HRTM 1210	Hospitality Law	3
BUSN 1190	Digital Technologies in Business	2	HRTM 1220	Supervision and Leadership in the Hospitality Industry	3
BUSN 1210	Electronics Calculators	2	HRTM 1230	Internship	3
BUSN 1230	Legal Terminology	3	XXXX xxxx	Occupationally-Related Electives	6
BUSN 1240	Office Procedures	3			
BUSN 1300	Introduction to Business	3			
BUSN 1310	Introduction to Business Culture	3			
BUSN 1400	Word Processing Applications	4			
BUSN 1410	Spreadsheet Concepts and Applications	4			
BUSN 1420	Database Applications	4			
BUSN 1430	Desktop Publishing & Presentation Applications	4			
BUSN 1440	Document Production	4			
BUSN 2160	Electronic Mail Applications	2			
BUSN 2180	Speed and Accuracy Keying	1			
BUSN 2190	Business Document Proofreading & Editing	3			
BUSN 2200	Office Accounting	4			
BUSN 2210	Applied Office Procedures	3			
BUSN 2220	Legal Administrative Procedures	3			
BUSN 2370	Medical Office Billing/Coding/Insurance	3			
	<b>Total Hours</b>	<b>60</b>			

## HOTEL/RESTAURANT/TOURISM MANAGEMENT (HM12)

Diploma

*Effective Spring 2018 (201814)*

Prepares students for employment in a variety of positions in today's hotel, restaurant, and tourism management fields. This program provides learning opportunities which 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 hotel, restaurant, and tourism management.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Math	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>36</b>
COMP 1000 Introduction to Computer Literacy	3
HRTM 1100 Introduction to Hotel, Restaurant, and Tourism Management	3
HRTM 1110 Travel Industry and Travel Geography - Americas	3
or HRTM 1115 Travel Industry and Travel Geography - International	(3)
HRTM 1140 Hotel Operations Management	3

HRTM 1150	Event Planning	3
HRTM 1160	Food and Beverage Management	3
HRTM 1201	Hospitality Marketing	3
HRTM 1210	Hospitality Law	3
HRTM 1220	Supervision and Leadership in the Hospitality Industry	3
HRTM 1230	Internship	3
XXXX xxxx	Occupationally-Related Electives	6
	<b>Occupationally-Related Electives:</b>	
HRTM 1105	Tourism in Georgia	3
HRTM 1115	Travel Industry and Travel Geography - International	3
HRTM 1120	Tour and Cruise Management	3
HRTM 1130	Business Etiquette	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1110	Employment Rules and Regulations	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 1135	Managerial Accounting and Finance	3
MGMT 2115	Human Resource Management	3
MGMT 2120	Labor Management Relations	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2135	Management Communication Techniques	3
MGMT 2140	Retail Management	3
MGMT 2145	Business Plan Development	3
MGMT 2150	Small Business Management	3
MGMT 2200	Production/Operations Management	3
MGMT 2205	Service Sector Management	3
MGMT 2210	Project Management	3
MGMT 2215	Team Project	3
SCMA 1001	Inventory Control Procedures	3
SCMA 1002	Purchasing	3
SCMA 1004	Quality Improvement Concepts	3
SCMA 1005	Distribution Principles	3
SCMA 1006	Supply Chain Management Principles	6
SCMA 1010	Manufacturing Planning and Control / JIT	5
SCMA 1050	Traffic Management	3
SCMA 1051	Warehouse Operations	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 1210	Services Marketing	3
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 1370	Consumer Behavior	3
MKTG 2000	Global Marketing	3
MKTG 2010	Small Business Management	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
MKTG 2080	Regulations and Compliance in Sports	3

MKTG 2090	Marketing Research	3
MKTG 2180	Principles of Sports Marketing	3
MKTG 2210	Entrepreneurship	6
MKTG 2280	Sports Management	3
MKTG 2300	Marketing Management	3
MKTG 2500	Exploring Social Media	3
MKTG 2550	Analyzing Social Media	3
BUSN 1100	Introduction to Keyboarding	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1210	Electronics Calculators	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2200	Office Accounting	4
BUSN 2210	Applied Office Procedures	3
BUSN 2220	Legal Administrative Procedures	3
BUSN 2370	Medical Office Billing/Coding/Insurance	3
<b>Total Hours</b>		<b>44</b>

## HOTEL/RESTAURANT/TOURISM MANAGEMENT (HM12)

Diploma

*Prior to Spring 2018 (201814)*

Prepares students for employment in a variety of positions in today's hotel, restaurant, and tourism management fields. This program provides learning opportunities which 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 hotel, restaurant, and tourism management.

### Education Requirements

**Admission:** High school diploma or GED®

**Graduation:** High school diploma or GED®

**Placement Scores:** Standard

**Minimum Age:** 16

**Semester(s) Offered:** Fall | Spring | Summer

**Location(s) Offered:** Macon

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HM12](http://www.centralgatech.edu/gainfulemployment/HM12)

	<b>Credit Hours</b>	
<b>General Education Core Courses</b>		
<b>8</b>		
ENGL 1010	Fundamentals of English I	3
or ENGL 1101	Composition and Rhetoric	(3)
MATH 1011	Business Math	3
or MATH 1012	Foundations of Mathematics	(3)
or MATH 1103	Quantitative Skills and Reasoning	(3)
or MATH 1101	Mathematical Modeling	(3)
or MATH 1111	College Algebra	(3)
EMPL 1000	Interpersonal Relations and Professional Development	2

<b>Occupational Courses</b>		<b>36</b>
COMP 1000	Introduction to Computer Literacy	3
HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3
HRTM 1110	Travel Industry and Travel Geography	3
HRTM 1140	Hotel Operations Management	3
HRTM 1150	Event Planning	3
HRTM 1160	Food and Beverage Management	3
HRTM 1201	Hospitality Marketing	3
HRTM 1210	Hospitality Law	3
HRTM 1220	Supervision and Leadership in the Hospitality Industry	3
HRTM 1230	Internship	3
XXXX xxxx	Occupationally-Related Electives	6

### Occupationally-Related Electives:

HRTM 1105	Tourism in Georgia	3
HRTM 1115	Travel Industry and Travel Geography - International	3
HRTM 1120	Tour and Cruise Management	3
HRTM 1130	Business Etiquette	3
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
MGMT 1100	Principles of Management	3
MGMT 1105	Organizational Behavior	3
MGMT 1110	Employment Rules and Regulations	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 1135	Managerial Accounting and Finance	3
MGMT 2115	Human Resource Management	3
MGMT 2120	Labor Management Relations	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2135	Management Communication Techniques	3
MGMT 2140	Retail Management	3
MGMT 2145	Business Plan Development	3
MGMT 2150	Small Business Management	3
MGMT 2200	Production/Operations Management	3
MGMT 2205	Service Sector Management	3
MGMT 2210	Project Management	3
MGMT 2215	Team Project	3
SCMA 1001	Inventory Control Procedures	3
SCMA 1002	Purchasing	3
SCMA 1004	Quality Improvement Concepts	3
SCMA 1005	Distribution Principles	3
SCMA 1006	Supply Chain Management Principles	6
SCMA 1010	Manufacturing Planning and Control / JIT	5
SCMA 1050	Traffic Management	3
SCMA 1051	Warehouse Operations	3
MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 1210	Services Marketing	3
MKTG 1280	Introduction to Sports and Recreation Management	3

MKTG 1370	Consumer Behavior	3	HRTM 1140	Hotel Operations Management	3
MKTG 2000	Global Marketing	3	HRTM 1150	Event Planning	3
MKTG 2010	Small Business Management	3	HRTM 1170	Hospitality, Industry Accounting, and Financial Analysis	3
MKTG 2060	Marketing Channels	3	HRTM 1210	Hospitality Law	3
MKTG 2070	Buying and Merchandising	3	HRTM 1220	Supervision and Leadership in the Hospitality Industry	3
MKTG 2080	Regulations and Compliance in Sports	3			
MKTG 2090	Marketing Research	3			
MKTG 2180	Principles of Sports Marketing	3			
MKTG 2210	Entrepreneurship	6			
MKTG 2280	Sports Management	3			
MKTG 2300	Marketing Management	3			
MKTG 2500	Exploring Social Media	3			
MKTG 2550	Analyzing Social Media	3			
BUSN 1100	Introduction to Keyboarding	3			
BUSN 1190	Digital Technologies in Business	2			
BUSN 1210	Electronics Calculators	2			
BUSN 1230	Legal Terminology	3			
BUSN 1240	Office Procedures	3			
BUSN 1300	Introduction to Business	3			
BUSN 1310	Introduction to Business Culture	3			
BUSN 1300	Introduction to Business	3			
BUSN 1310	Introduction to Business Culture	3			
BUSN 1400	Word Processing Applications	4			
BUSN 1410	Spreadsheet Concepts and Applications	4			
BUSN 1420	Database Applications	4			
BUSN 1430	Desktop Publishing & Presentation Applications	4			
BUSN 1440	Document Production	4			
BUSN 2160	Electronic Mail Applications	2			
BUSN 2180	Speed and Accuracy Keying	1			
BUSN 2190	Business Document Proofreading & Editing	3			
BUSN 2200	Office Accounting	4			
BUSN 2210	Applied Office Procedures	3			
BUSN 2220	Legal Administrative Procedures	3			
BUSN 2370	Medical Office Billing/Coding/Insurance	3			
	<b>Total Hours</b>	<b>44</b>			

### HOSPITALITY OPERATIONS ASSOCIATE (HP31)

Technical Certificate of Credit

The Hospitality Operations Associate program prepares students for employment in a variety of positions in today's Hotel/Restaurant/Tourism fields. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of Hotel/Restaurant/Tourism.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Putnam Warner Robins

		Credit Hours
HRTM 1100	Introduction to Hotel, Restaurant, and Tourism Management	3
HRTM 1160	Food and Beverage Management	3
HRTM 1201	Hospitality Marketing	3
HRTM xxxx	Occupationally Related Elective(s)	3

#### Occupationally Related Electives:

HRTM 1110	Travel Industry and Travel Geography	3
HRTM 1115	Travel Industry and Travel Geography - International	3
HRTM 1120	Tour and Cruise Management	3
HRTM 1130	Business Etiquette	3

# INFORMATION TECHNOLOGY PROFESSIONAL

## INFORMATION TECHNOLOGY PROFESSIONAL (ITP3)

Associate Degree

Emphasizes specialized training in home and corporate networking; computer maintenance; operating system installation, maintenance, and troubleshooting; information security; computer programming; and web site design. These skills represent the subset of knowledge expected from graduates in CGTC's service area. Graduates are employable as an information technology specialist, help desk support specialist, network installation specialist, PC repair technician, or network administrator.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

**Credit  
Hours**

### General Education Core Courses<sup>15</sup>

*Area I - English/Humanities/Fine Arts*

ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*

XXXX xxxx Social/Behavioral Sciences Elective 3

*Area III - Natural Sciences/Mathematics*

MATH 1103 Quantitative Skills and Reasoning 3  
 or MATH 1101 Mathematical Modeling (3)  
 or MATH 1111 College Algebra (3)

*Area IV - Humanities/Fine Arts*

XXXX xxxx Humanities/Fine Arts Elective 3

Program-Specific Requirement

XXXX xxxx General Education Core Elective (Areas I - IV) 3

### Occupational Courses 50

COMP 1000 Introduction to Computer Literacy 3

CIST 1001 Computer Concepts 4

CIST 1122 Hardware Installation and Maintenance 4

CIST 1130 Operating Systems Concepts 3

or CIST 1135 Operating Systems and Virtual/Cloud Computing (4)

CIST 1305 Program Design and Development 3

CIST 1401 Computer Networking Fundamentals 4

CIST 1601 Information Security Fundamentals 3

CIST 2411 Microsoft Client 4

Choose one of the following Server electives:

CIST 2412 Microsoft Server Directory Services 4

CIST 2413 Microsoft Server Infrastructure 4

CIST 2414 Microsoft Server Administrator 4

CIST 2432 Unix/Linux Server 4

CIST 2451 Introduction to Networks - Cisco 4

CIST 2452 Cisco Routing and Switching Essentials 4

CIST xxxx CIST Elective(s) 6

Choose one of the following Programming courses:

CIST 2311 Visual Basic I 4

CIST 2341 C# Programming I 4

CIST 2351 PHP Programming I 4

CIST 2361 C++ Programming I 4

CIST 2371 Java Programming I 4

CIST 2381 Mobile Application Development 4

CIST 2580 Interactive and Social Apps Integration 4

*CIST Electives:*

CIST 1101 Working with Microsoft Windows 3

CIST 1102 Keyboarding 3

CIST 1141 Network + Preparation 4

CIST 1180 Advanced Topics in Operating Systems 3

CIST 1200 Database Management 4

CIST 1210 Introduction to Oracle Databases 4

CIST 1220 Structured Query Language 4

CIST 1510 Web Development I 3

CIST 1520 Scripting Technologies 3

CIST 1530 Web Graphics I 3

CIST 1540 Web Animation I 3

CIST 1601 Information Security Fundamentals 3

CIST 1602 Security Policies and Procedures 3

CIST 2122 A+ Preparation 3

CIST 2129 Comprehensive Database Techniques 4

CIST 2130 Desktop Support Concepts 3

CIST 2126 Comprehensive Presentation and Email 3

CIST 2127 Comprehensive Word Processing Techniques 3

CIST 2128 Comprehensive Spreadsheet Techniques 3

CIST 2212 Oracle Database Administration I 4

CIST 2214 Oracle Database Administration II 4

CIST 2216 Oracle Advanced Topics 4

CIST 2222 Administering Microsoft SQL Server 4

CIST 2224 Designing and Implementing Databases with Microsoft SQL Server 4

CIST 2311 Visual Basic Programming I 4

CIST 2312 Visual Basic Programming II 4

CIST 2313 Visual Basic Programming III 4

CIST 2341 C# Programming I 4

CIST 2342 C# Programming II 4

CIST 2343 C# Programming III 4

CIST 2361 C++ Programming I 4

CIST 2362 C++ Programming II 4

CIST 2371 Java Programming I 4

CIST 2372 Java Programming II 4

CIST 2373 Java Programming III 4

CIST 2351 PHP Programming 4

CIST 2352 PHP Programming II 4

CIST 2381 Mobile Application Development 4

CIST 2412 IMicrosoft Server Directory Services 4

CIST 2413 Microsoft Server Infrastructure 4

CIST 2420 Microsoft Exchange Server 4

CIST 2431 UNIX/Linux Introduction 4

CIST 2432 UNIX/Linux Server 4

CIST 2433 UNIX/Linux Advanced Server 4

CIST 2434 UNIX/Linux Scripting 4

CIST 2441 Cisco Networking for Home and Small Business 4

CIST 2442 CISCO Working at a Small-to-Medium Business or ISP 4

CIST 2443 CISCO Routing and Switching 4

CIST 2444 CISCO Designing and Supporting Computer Networks 4

CIST 2453 Cisco Scaling Networks 4

CIST 2454 Cisco Connecting Networks 4

CIST 2455 CISCO CCNA Security 4

CIST 2471 CCNP ROUTE: Implementing IP Routing 4

CIST 2472 CCNP SWITCH: Implementing IP Switching 4

CIST 2473 CCNP TSHOOT: Maintaining and Troubleshooting IP Networks 4



CIST 2510	Web Technologies	3	CIST 2411	Microsoft Client	4
CIST 2531	Web Graphics II	3	CIST xxxx	CIST Server Elective(s) from the list below	4
CIST 2541	Web Animation II	3	CIST 2451	Introduction to Networks - Cisco	4
CIST 2550	Web Development II	3	CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2560	Web Application Programming I	4	CIST xxxx	CIST Elective(s)	6
CIST 2561	Web Application Programming II	4			
CIST 2570	Open Source Web Application Programming I	4		Choose one of the following Programming courses:	
CIST 2571	Open Source Web Application Programming II	4	CIST 2311	Visual Basic I	4
CIST 2580	Interactive & Social Apps Integration	4	CIST 2341	C# Programming I	4
CIST 2602	Network Security	4	CIST 2351	PHP Programming I	4
CIST 2611	Implementing Internet/Intranet Firewalls	4	CIST 2361	C++ Programming I	4
CIST 2612	Computer Forensics	3	CIST 2371	Java Programming I	4
CIST 2631	Cyber Crime Technology	3	CIST 2381	Mobile Application Development	4
CIST 2632	Computer Forensic Project	3	CIST 2580	Interactive and Social Apps Integration	4
CIST 2921	IT Analysis, Design, and Project Management	4			
CIST 2991	Internship I	3			
	<b>Total Hours</b>	<b>65</b>			

### INFORMATION TECHNOLOGY PROFESSIONAL (ITP4) Diploma

Prepares students for careers in the field of information technology. The program emphasizes specialized training in home and corporate networking, computer maintenance, operating system installation, maintenance, and troubleshooting, information security, computer programming; and web site design. These skills represent the subset of knowledge expected from graduates in the college's service area. Graduates are employable as an information technology specialist, help desk support specialist, network installation specialist, computer repair technician, or network administrator.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ITP4](http://www.centralgatech.edu/gainfulemployment/ITP4)

	<b>Credit Hours</b>				
<b>General Education Core Courses</b>	<b>8</b>				
ENGL 1010	Fundamentals of English I	3	CIST 2311	Visual Basic Programming I	4
or ENGL 1101	Composition and Rhetoric	(3)	CIST 2312	Visual Basic Programming II	4
MATH 1011	Business Math	3	CIST 2313	Visual Basic Programming III	4
or MATH 1012	Foundations of Mathematics	(3)	CIST 2341	C# Programming I	4
or MATH 1103	Quantitative Skills and Reasoning	(3)	CIST 2342	C# Programming II	4
or MATH 1101	Mathematical Modeling	(3)	CIST 2343	C# Programming III	4
or MATH 1111	College Algebra	(3)	CIST 2361	C++ Programming I	4
EMPL 1000	Interpersonal Relations and Professional Development	2	CIST 2362	C++ Programming II	4
			CIST 2371	Java Programming I	4
			CIST 2372	Java Programming II	4
			CIST 2373	Java Programming III	4
			CIST 2351	PHP Programming	4
			CIST 2352	PHP Programming II	4
			CIST 2381	Mobile Application Development	4
			CIST 2412	IMicrosoft Server Directory Services	4
			CIST 2413	Microsoft Server Infrastructure	4
			CIST 2420	Microsoft Exchange Server	4
			CIST 2431	UNIX/Linux Introduction	4
			CIST 2432	UNIX/Linux Server	4
			CIST 2433	UNIX/Linux Advanced Server	4
			CIST 2434	UNIX/Linux Scripting	4
			CIST 2441	Cisco Networking for Home and Small Business	4
			CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
<b>Occupational Courses</b>	<b>50</b>				
COMP 1000	Introduction to Computer Literacy	3			
CIST 1001	Computer Concepts	3			
CIST 1122	Hardware Installation and Maintenance	4			
CIST 1130	Operating Systems Concepts	3			
or CIST 1135	Operating Systems and Virtual-Cloud Computing	3			
CIST 1305	Program Design and Development	3			
CIST 1401	Computer Networking Fundamentals	4			
CIST 1601	Information Security Fundamentals	3			

CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>58</b>

## LOGISTICS MANAGEMENT

### LOGISTICS MANAGEMENT (DM23)

Associate Degree

Prepares students for employment in a variety of businesses and industries. This program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | Online

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>46</b>
COMP 1000 Introduction to Computer Literacy	3
MGMT 1100 Principles of Management	3
MKTG 1100 Principles of Marketing	3
SCMA 1001 Inventory Control Procedures	3
SCMA 1002 Purchasing	3
SCMA 1005 Distribution Principles	3
SCMA 1006 Supply Chain Management Principles	6
SCMA 1008 Supply Chain Management OBI I	1
SCMA 1009 Supply Chain Management OBI II	1
<i>Select a minimum of 20 credit hours from:</i>	
ACCT 1100 Financial Accounting I	4
IDFC 1007 Industrial Safety Procedures	2
MGMT 2135 Management Communication Techniques	3
MKTG 1130 Business Regulations and Compliance	3
SCMA 1004 Quality Improvement Concepts	3
or ASTT 1050 Aerospace Quality Management	(3)
SCMA 1010 Manufacturing Planning and Control / JIT	5
SCMA 1050 Traffic Management	3
SCMA 1051 Warehouse Operations	3
<b>Total Hours</b>	<b>61</b>

### LOGISTICS MANAGEMENT (DM12)

Diploma

Prepares students for employment in a variety of businesses and industries. This program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for a job acquisition, retention, and advancement.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/DM12](http://www.centralgatech.edu/gainfulemployment/DM12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1011 Business Math	3
or MATH 1012 Foundations of Mathematics	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>41</b>
COMP 1000 Introduction to Computer Literacy	3
MKTG 1100 Principles of Marketing	3
MGMT 1100 Principles of Management	3
MGMT 2135 Management Communication Techniques	3
SCMA 1001 Inventory Control Procedures	3
SCMA 1002 Purchasing	3
SCMA 1005 Distribution Principles	3
SCMA 1006 Supply Chain Management Principles	6
SCMA 1008 Supply Chain Management OBI I	1
SCMA 1009 Supply Chain Management OBI II	1
<i>Select a minimum of 12 credit hours from:</i>	
ACCT 1100 Financial Accounting I	4
IDFC 1007 Industrial Safety Procedures	2
MKTG 1130 Business Regulations and Compliance	3
SCMA 1004 Quality Improvement Concepts	3
or ASTT 1050 Aerospace Quality Management	(3)
SCMA 1010 Manufacturing Planning and Control / JIT	5
SCMA 1050 Traffic Management	3
SCMA 1051 Warehouse Operations	3
<b>Total Hours</b>	<b>49</b>

**INVENTORY CONTROL TECHNICIAN (IC41)**

Technical Certificate of Credit

Prepares students for employment in an inventory control function for any business.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Crawford | Macon | Milledgeville  
 Putnam | Warner Robins

	<b>Credit Hours</b>
IDFC 1007 Industrial Safety Procedures	2
MATH 1012 Foundations of Mathematics	3
or MATH 1111 College Algebra	(3)
SCMA 1001 Inventory Control Procedures	3
SCMA 1005 Distribution Principles	3
SCMA 1051 Warehouse Operations	3
<b>Total Hours</b>	<b>14</b>

**PURCHASING TECHNICIAN (PT81)**

Technical Certificate of Credit

Prepares students for a position with a distribution center and any other business with a purchasing function.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Crawford | Macon | Milledgeville | Putnam

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/PT81](http://www.centralgatech.edu/gainfulemployment/PT81)

	<b>Credit Hours</b>
ACCT 1100 Financial Accounting I	4
SCMA 1002 Purchasing	3
SCMA 1006 Supply Chain Management Principles	6
SCMA 1010 Manufacturing Planning and Control / JIT	5
<b>Total Hours</b>	<b>18</b>

**WAREHOUSE AND DISTRIBUTION TECHNICIAN (WA21)**

Technical Certificate of Credit

Prepares individuals to meet or exceed entry level distribution and warehousing industry requirements for employees. The program will provide theory and application training in essential knowledge, skills, abilities, and attitudes to successfully perform in warehousing and distribution positions.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Crawford | Macon | Milledgeville  
 Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/WA21](http://www.centralgatech.edu/gainfulemployment/WA21)

	<b>Credit Hours</b>
COMP 1000 Introduction to Computer Literacy	3
IDFC 1007 Industrial Safety Procedures	2
SCMA 1001 Inventory Control Procedures	3
SCMA 1005 Distribution Principles	3
SCMA 1006 Supply Chain Management Principles	6
SCMA 1004 Quality Improvement Concepts	3
or ASTT 1050 Aerospace Quality Management	(3)
<b>Total Hours</b>	<b>20</b>

# MARKETING MANAGEMENT

## MARKETING MANAGEMENT (MM13)

Associate Degree

Prepares 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 management.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

### General Education Core Courses

	Credit Hours
<b>Area I - English/Humanities/Fine Arts</b>	<b>15</b>
ENGL 1101 Composition and Rhetoric	3
<b>Area II - Social/Behavioral Sciences</b>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<b>Area III - Natural Sciences/Mathematics</b>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Area IV - Humanities/Fine Arts</b>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Program-Specific Requirement</b>	
XXXX xxxx General Education Core Elective (Areas I - IV)	3

### Occupational Courses

ACCT 1100 Financial Accounting I	4
COMP 1000 Introduction to Computer Literacy	3
MGMT 1100 Principles of Management	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3
MKTG 1160 Professional Selling	3
MKTG 1190 Integrated Marketing Communications	3
MKTG 2090 Marketing Research	3
XXXX xxxx Occupational Related Elective	3

Choose two (2) of the following three courses:

MKTG 2000 Global Marketing	3
MKTG 2290 Marketing Internship/Practicum	3
MKTG 2300 Marketing Management	3

Choose one of the following three courses:

MKTG 2030 Digital Publishing and Design	3
BUSN 1190 Digital Technologies in Business	2
BUSN 1430 Desktop Publishing and Presentation Applications	4

### CHOOSE ONE OF SEVEN SPECIALIZATIONS

<b>Marketing Management Specialization (8MM3)</b>	<b>12</b>
MKTG 1370 Consumer Behavior	3
MKTG 2060 Marketing Channels	3
or MKTG xxxx MKTG Elective(s) from the	

	Occupational Related Electives list below	(3)
MKTG xxxx	MKTG Elective(s) from the Occupationally Related Electives list below	3
MKTG 1210	Services Marketing	3
or MKTG 2070	Buying and Merchandising	(3)
<b>Entrepreneurship Specialization (8EN3)</b>		<b>12</b>
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6
MKTG 1210	Services Marketing	3
or MKTG 2070	Buying and Merchandising	(3)
<b>E-Business Specialization (8EB3)</b>		<b>11</b>
BUSN 2170	Web Page Design	2
MKTG 2210	Entrepreneurship	6
MKTG 1210	Services Marketing	3
or MKTG 2070	Buying and Merchandising	3
<b>Retail Management Specialization (8RM3)</b>		<b>12</b>
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3
<b>Professional Selling Specialization (8P23)</b>		<b>12</b>
MKTG 1210	Services Marketing	3
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
or MKTG xxxx	MKTG Elective(s) from the Occupational Related Electives list below	3
MKTG 2160	Advanced Selling	3
<b>Social Media Marketing Specialization (8S23)</b>		<b>12</b>
MKTG 2500	Exploring Social Media	3
MKTG 2550	Analyzing Social Media	3
MKTG 1370	Consumer Behavior	3
MKTG xxxx	MKTG Elective(s) from the Occupational Related Electives list below	3
<b>Sports Marketing Specialization (8SM3)</b>		<b>12</b>
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 2080	Regulations and Compliance in Sports	3
MKTG 2180	Principles of Sports Marketing	3
MKTG 2280	Sports Management	3
<b>Occupational Related Electives:</b>		
MKTG 1210	Services Marketing	3
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 1370	Consumer Behavior	3
MKTG 2000	Global Marketing	3
MKTG 2010	Small Business Management	3
MKTG 2060	Marketing Channels	3
MKTG 2070	Buying and Merchandising	3
MKTG 2080	Regulations and Compliance in Sports	3
MKTG 2180	Principles of Sports Marketing	3
MKTG 2210	Entrepreneurship	6
MKTG 2280	Sports Management	3
MKTG 2300	Marketing Management	3
MKTG 2500	Exploring Social Media	3
MKTG 2550	Analyzing Social Media	3
ACCT 1105	Financial Accounting II	4
ACCT 2000	Managerial Accounting	3
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3

ACCT 1130	Payroll Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT 2135	Introduction to Governmental and Nonprofit Accounting	3
ACCT 2140	Legal Environment of Business	3
ACCT 2145	Personal Finance	3
ACCT 2150	Principles of Auditing	3
BAFN 1100	Introduction to Banking and Finance	3
BAFN 1105	Bank Business and Information Systems	3
BAFN 1110	Money and Banking	3
BAFN 1115	Personal Financial Planning	3
BAFN 2200	Finance	3
BAFN 2205	Real Estate Finance	3
BAFN 2210	Contemporary Bank Management	3
BAFN 2215	Investments	3
BUSN 1100	Introduction to Keyboarding	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1210	Electronics Calculators	2
BUSN 1230	Legal Terminology	3
BUSN 1240	Office Procedures	3
BUSN 1300	Introduction to Business	3
BUSN 1310	Introduction to Business Culture	3
BUSN 1400	Word Processing Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing & Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2180	Speed and Accuracy Keying	1
BUSN 2190	Business Document Proofreading & Editing	3
BUSN 2200	Office Accounting	4
BUSN 2210	Applied Office Procedures	3
BUSN 2220	Legal Administrative Procedures	3
BUSN 2370	Medical Office Billing/Coding/Insurance	3
MGMT 1105	Organizational Behavior	3
MGMT 1110	Employment Rules and Regulations	3
MGMT 1115	Leadership	3
MGMT 1120	Introduction to Business	3
MGMT 1125	Business Ethics	3
MGMT 1135	Managerial Accounting and Finance	3
MGMT 2115	Human Resource Management	3
MGMT 2120	Labor Management Relations	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2135	Management Communication Techniques	3
MGMT 2140	Retail Management	3
MGMT 2145	Business Plan Development	3
MGMT 2150	Small Business Management	3
MGMT 2205	Service Sector Management	3
MGMT 2210	Project Management	3
MGMT 2215	Team Project	3
SCMA 1001	Inventory Control Procedures	3
SCMA 1002	Purchasing	3
SCMA 1004	Quality Improvement Concepts	3
SCMA 1005	Distribution Principles	3
SCMA 1006	Supply Chain Management Principles	6
SCMA 1010	Manufacturing Planning and Control / JIT	5
SCMA 1050	Traffic Management	3
SCMA 1051	Warehouse Operations	3
	<b>Total Hours</b>	<b>62</b>

**MARKETING MANAGEMENT (MM12)**

Diploma

Prepares 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 management.

**Education Requirements****Admission:** High school diploma or GED®**Graduation:** High school diploma or GED®**Placement Scores:** Standard**Minimum Age:** 16**Semester(s) Offered:** Fall | Spring | Summer**Location(s) Offered:** Macon**Gainful Employment:**[www.centralgatech.edu/gainfulemployment/MM12](http://www.centralgatech.edu/gainfulemployment/MM12)**Credit Hours****General Education Core Courses****8**

ENGL 1010	Fundamentals of English I	3
or ENGL 1101	Composition and Rhetoric	3
MATH 1011	Business Math	3
or MATH 1012	Foundations of Mathematics	3
or MATH 1103	Quantitative Skills and Reasoning	3
or MATH 1101	Mathematical Modeling	3
or MATH 1111	College Algebra	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or PSYC 1010	Basic Psychology	3

**Occupational Courses****23**

MKTG 1100	Principles of Marketing	3
MKTG 1130	Business Regulations and Compliance	3
MKTG 1160	Professional Selling	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 2090	Marketing Research	3
XXXX xxxx	Occupational Elective from the list below	3

Choose one of the following four courses:

MKTG 2000	Global Marketing	3
MKTG 2290	Marketing Internship/Practicum	3
MKTG 2300	Marketing Management	3
COMP 1000	Introduction to Computer Literacy	3

Choose one of the following three courses:

MKTG 2030	Digital Publishing and Design	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1430	Desktop Publishing and Presentation Applications	4

**CHOOSE ONE OF SEVEN SPECIALIZATIONS**

<i>Marketing Management Specialization (8MM2)</i>		<b>12</b>
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3
or MKTG xxxx	MKTG Elective(s) from the Occupational Related Electives	(3)
MKTG xxxx	MKTG Elective(s) from the Occupational Related Electives	3
MKTG 1210	Services Marketing	3
or MKTG 2070	Buying and Merchandising	(3)

*Entrepreneurship Specialization (8EN2)***12**

MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6

MKTG 1210 Services Marketing	3	BAFN 2200 Finance	3
or MKTG 2070 Buying and Merchandising	(3)	BAFN 2205 Real Estate Finance	3
<i>E-Business Specialization (8EB2)</i>	11	BAFN 2210 Contemporary Bank Management	3
BUSN 2170 Web Page Design	2	BAFN 2215 Investments	3
MKTG 2210 Entrepreneurship	6	BUSN 1100 Introduction to Keyboarding	3
MKTG 1210 Services Marketing	3	BUSN 1190 Digital Technologies in Business	2
or MKTG 2070 Buying and Merchandising	3	BUSN 1210 Electronics Calculators	2
<i>Retail Management Specialization (8RM2)</i>	12	BUSN 1230 Legal Terminology	3
MKTG 1270 Visual Merchandising	3	BUSN 1240 Office Procedures	3
MKTG 1370 Consumer Behavior	3	BUSN 1300 Introduction to Business	3
MKTG 2070 Buying and Merchandising	3	BUSN 1310 Introduction to Business Culture	3
MKTG 2270 Retail Operations Management	3	BUSN 1400 Word Processing Applications	4
<i>Professional Selling Specialization (8P12)</i>	12	BUSN 1410 Spreadsheet Concepts and Applications	4
MKTG 1210 Services Marketing	3	BUSN 1420 Database Applications	4
MKTG 1370 Consumer Behavior	3	BUSN 1430 Desktop Publishing & Presentation Applications	4
MKTG 2060 Marketing Channels	3	BUSN 1440 Document Production	4
or MKTG xxxx Marketing Elective from the list below	(3)	BUSN 2160 Electronic Mail Applications	2
MKTG 2160 Advanced Selling	3	BUSN 2180 Speed and Accuracy Keying	1
<i>Social Media Marketing Specialization (8S12)</i>	12	BUSN 2190 Business Document Proofreading & Editing	3
MKTG 2500 Exploring Social Media	3	BUSN 2200 Office Accounting	4
MKTG 2550 Analyzing Social Media	3	BUSN 2210 Applied Office Procedures	3
MKTG 1370 Consumer Behavior	3	BUSN 2220 Legal Administrative Procedures	3
MKTG xxxx Marketing Elective from the list below	3	BUSN 2370 Medical Office Billing/Coding/Insurance	3
<i>Sports Marketing Specialization (8SM2)</i>	12	MGMT 1105 Organizational Behavior	3
MKTG 1280 Introduction to Sports and Recreation Management	3	MGMT 1110 Employment Rules and Regulations	3
MKTG 2080 Regulations and Compliance in Sports	3	MGMT 1115 Leadership	3
MKTG 2180 Principles of Sports Marketing	3	MGMT 1120 Introduction to Business	3
MKTG 2280 Sports Management	3	MGMT 1125 Business Ethics	3
<i>Occupational Related Electives:</i>		MGMT 1135 Managerial Accounting and Finance	3
MKTG 1210 Services Marketing	3	MGMT 2115 Human Resource Management	3
MKTG 1280 Introduction to Sports and Recreation Management	3	MGMT 2120 Labor Management Relations	3
MKTG 1370 Consumer Behavior	3	MGMT 2125 Performance Management	3
MKTG 2000 Global Marketing	3	MGMT 2130 Employee Training and Development	3
MKTG 2010 Small Business Management	3	MGMT 2135 Management Communication Techniques	3
MKTG 2060 Marketing Channels	3	MGMT 2140 Retail Management	3
MKTG 2070 Buying and Merchandising	3	MGMT 2145 Business Plan Development	3
MKTG 2080 Regulations and Compliance in Sports	3	MGMT 2150 Small Business Management	3
MKTG 2180 Principles of Sports Marketing	3	MGMT 2205 Service Sector Management	3
MKTG 2210 Entrepreneurship	6	MGMT 2210 Project Management	3
MKTG 2280 Sports Management	3	MGMT 2215 Team Project	3
MKTG 2300 Marketing Management	3	SCMA 1001 Inventory Control Procedures	3
MKTG 2500 Exploring Social Media	3	SCMA 1002 Purchasing	3
MKTG 2550 Analyzing Social Media	3	SCMA 1004 Quality Improvement Concepts	3
ACCT 1105 Financial Accounting II	4	SCMA 1005 Distribution Principles	3
ACCT 2000 Managerial Accounting	3	SCMA 1006 Supply Chain Management Principles	6
ACCT 1115 Computerized Accounting	3	SCMA 1010 Manufacturing Planning and Control / JIT	5
ACCT 1120 Spreadsheet Applications	4	SCMA 1050 Traffic Management	3
ACCT 1125 Individual Tax Accounting	3	SCMA 1051 Warehouse Operations	3
ACCT 1130 Payroll Accounting	3	<b>Total Hours</b>	<b>42</b>
ACCT 2120 Business Tax Accounting	3		
ACCT 2135 Introduction to Governmental and Nonprofit Accounting	3		
ACCT 2140 Legal Environment of Business	3		
ACCT 2145 Personal Finance	3		
ACCT 2150 Principles of Auditing	3		
BAFN 1100 Introduction to Banking and Finance	3		
BAFN 1105 Bank Business and Information Systems	3		
BAFN 1110 Money and Banking	3		
BAFN 1115 Personal Financial Planning	3		

### ENTREPRENEURSHIP (EN11)

Technical Certificate of Credit

Prepares individuals to perform development, marketing and management functions associated with owning and operating a business.

#### Education Requirements

**Admission:** High school diploma or GED®

**Graduation:** High school diploma or GED®

**Placement Scores:** Standard

**Minimum Age:** 16

**Semester(s) Offered:** Fall | Spring | Summer

**Location(s) Offered:** Crawford | Macon | Online

**Credit Hours**

MKTG 1130	Business Regulations and Compliance	3
MKTG 2210	Entrepreneurship	6
MGMT 1100	Principles of Management	3
or MKTG 2010	Small Business Management	(3)
<b>Total Hours</b>		<b>12</b>



# NETWORKING SPECIALIST

## NETWORKING SPECIALIST (NS13)

Associate Degree

Provides 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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>36</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	(3)
CIST 1401 Computer Networking Fundamentals	4
or CIST 2451 Cisco Network Fundamentals	(4)
CIST 1601 Information Security Fundamentals	3
CIST xxxx CIST Elective(s)	14

### COMPLETION OF ONE OF THE SPECIALIZATIONS IS REQUIRED

<i>CISCO EXPLORATION SPECIALIZATION (8C23)</i>	<i>16</i>
CIST 2451 Introduction to Networks - Cisco	4
CIST 2452 Cisco Routing and Switching Essentials	4
CIST 2453 Cisco Scaling Networks	4
CIST 2454 Cisco Connecting Networks	4
<i>LINUX/UNIX NETWORKING SPECIALIZATION (8L23)</i>	<i>16</i>
CIST 2431 UNIX/Linux Introduction	4
CIST 2432 UNIX/Linux Server	4
CIST 2433 UNIX/Linux Advanced Server	4
CIST 2434 UNIX/Linux Scripting	4

### MICROSOFT WINDOWS NETWORKING

<i>SPECIALIZATION (8M13)</i>	<i>16</i>
CIST 2411 Microsoft Client	4
CIST 2412 Microsoft Server Directory Services	4
CIST 2413 Microsoft Server Infrastructure	4
CIST 2414 Microsoft Server Administrator	4

### CIST Electives:

CIST 1101 Working with Microsoft Windows	3
CIST 1102 Keyboarding	3
CIST 1141 Network + Preparation	4
CIST 1180 Advanced Topics in Operating Systems	3
CIST 1200 Database Management	4
CIST 1210 Introduction to Oracle Databases	4
CIST 1220 Structured Query Language	4
CIST 1305 Program Design and Development	3
CIST 1401 Computer Networking Fundamentals	4
CIST 1510 Web Development I	3
CIST 1520 Scripting Technologies	3
CIST 1530 Web Graphics I	3
CIST 1540 Web Animation I	3
CIST 1601 Information Security Fundamentals	3
CIST 1602 Security Policies and Procedures	3
CIST 2122 A+ Preparation	3
CIST 2129 Comprehensive Database Techniques	4
CIST 2130 Desktop Support Concepts	3
CIST 2126 Comprehensive Presentation and Email Techniques	3
CIST 2127 Comprehensive Word Processing Techniques	3
CIST 2128 Comprehensive Spreadsheet Techniques	3
CIST 2212 Oracle Database Administration I	4
CIST 2214 Oracle Database Administration II	4
CIST 2216 Oracle Advanced Topics	4
CIST 2222 Administering Microsoft SQL Server	4
CIST 2224 Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311 Visual Basic Programming I	4
CIST 2312 Visual Basic Programming II	4
CIST 2313 Visual Basic Programming III	4
CIST 2341 C# Programming I	4
CIST 2342 C# Programming II	4
CIST 2343 C# Programming III	4
CIST 2361 C++ Programming I	4
CIST 2362 C++ Programming II	4
CIST 2371 Java Programming I	4
CIST 2372 Java Programming II	4
CIST 2373 Java Programming III	4
CIST 2351 PHP Programming	4
CIST 2352 PHP Programming II	4
CIST 2381 Mobile Application Development	4
CIST 2411 Microsoft Client	4
CIST 2412 Microsoft Server Directory Services	4
CIST 2413 Microsoft Server Infrastructure	4
CIST 2414 Microsoft Server Administrator	4
CIST 2420 Microsoft Exchange Server	4
CIST 2431 UNIX/Linux Introduction	4
CIST 2432 UNIX/Linux Server	4
CIST 2433 UNIX/Linux Advanced Server	4
CIST 2434 UNIX/Linux Scripting	4
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443 CISCO Routing and Switching	4
CIST 2444 CISCO Designing and Supporting Computer Networks	4
CIST 2451 Introduction to Networks - Cisco	4
CIST 2452 Cisco Routing and Switching Essentials	4

CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>66</b>

**NETWORKING SPECIALIST (NS14)**

Diploma

Provides 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.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/NS14](http://www.centralgatech.edu/gainfulemployment/NS14)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition & Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>35</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3

CIST 1601	Information Security Fundamentals	3
CIST xxxx	CIST Elective(s)	14
CIST 1401	Computer Networking Fundamentals	4
or CIST 2451	Cisco Network Fundamentals	(4)

**Complete one specialization:**

<b>CISCO EXPLORATION SPECIALIZATION (8C12)</b>	<b>16</b>	
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4

**LINUX/UNIX SPECIALIZATIONS (8LS2)**

CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4

**MICROSOFT WINDOWS NETWORKING SPECIALIZATION (8M42)**

CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4

**CIST Electives:**

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1141	Network + Preparation	4
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4

CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	IMicrosoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
	<b>Total Hours</b>	<b>59</b>

## SPORTS AND FITNESS MANAGEMENT

### SPORTS AND FITNESS MANAGEMENT (RA13)

Associate Degree  
Effective Spring 2018 (201814)

Graduates of this program will qualify for careers in local parks and recreation agencies, YMCAs, community-based programs, adult and youth correctional facilities, campus recreation, military recreation and varied recreation settings.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | Online

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I – Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II – Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III – Natural Sciences/Mathematics</i>	
MATH 1101 Mathematical Modeling	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>23</b>
COMP 1000 Introduction to Computer Literacy	3
RELM 2010 Introduction to Sports and Fitness Management	3
RELM 2020 Recreation Leadership and Supervision	3
RELM 2030 Sports and Fitness Facility Management and Design	3
RELM 2040 Program Planning in Sports and Fitness	3
RELM 2050 Sports and Fitness Management Internship	2
XXXX xxxx Occupationally-Related Elective(s)	6
<b>Choose 18 hours from the following list of courses:</b>	<b>18</b>
ACCT 1100 Financial Accounting I	4
ACCT 1120 Spreadsheet Applications	4
ACCT 2140 Legal Environment of Business	3
BUSN 1190 Digital Technologies in Business	2
BUSN 1410 Spreadsheet Concepts and Applications	4
BUSN 1420 Database Applications	4
BUSN 1430 Desktop Publishing & Presentation Applications	4
CIST 1001 Computer Concepts	4
CRJU 1010 Introduction to Criminal Justice	3
ECON 1101 Principles of Economics	3
HORT 1330 Turfgrass Management	3
MGMT 1100 Principles of Management	3
MKTG 1100 Principles of Marketing	3
MKTG 1130 Business Regulations and Compliance	3
MKTG 1370 Consumer Behavior	3

<b>Choose 4 hours from the following list of courses:</b>	<b>4</b>
RELM 2042 Beginning Tennis	2
RELM 2043 Weight Training	2
RELM 2045 Beginning Golf	2
RELM 2046 Volleyball	2

#### Occupationally-Related Electives:

MKTG 1280 Introduction to Sports and Recreation Management	3
MKTG 2180 Principles of Sports Marketing	3
MKTG 2280 Sports Management	3
<b>Minimum Total Hours</b>	<b>60</b>

### SPORTS AND FITNESS MANAGEMENT (RA12)

Diploma  
Effective Spring 2018 (201814)

Graduates of this program will qualify for careers in local parks and recreation agencies, YMCAs, community-based programs, adult and youth correctional facilities, campus recreation, military recreation and varied recreation settings.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/RA12](http://www.centralgatech.edu/gainfulemployment/RA12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition & Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>23</b>
COMP 1000 Introduction to Computer Literacy	3
RELM 2010 Introduction to Sports and Fitness Management	3
RELM 2020 Recreation Leadership and Supervision	3
RELM 2030 Sports and Fitness Facility Management and Design	3
RELM 2040 Program Planning in Sports and Fitness	3
RELM 2050 Sports and Fitness Management Internship	2
XXXX xxxx Occupationally-Related Elective(s)	6
<b>Choose 18 hours from the following list of courses:</b>	<b>18</b>
ACCT 1100 Financial Accounting I	4
ACCT 1120 Spreadsheet Applications	4
ACCT 2140 Legal Environment of Business	3
BUSN 1190 Digital Technologies in Business	2
BUSN 1410 Spreadsheet Concepts and Applications	4
BUSN 1420 Database Applications	4
BUSN 1430 Desktop Publishing and Presentation Applications	4
CIST 1001 Computer Concepts	4
CRJU 1010 Introduction to Criminal Justice	3

HORT 1330	Turfgrass Management	3	CIST 1001	Computer Concepts	4
MGMT 1100	Principles of Management	3	CRJU 1010	Introduction to Criminal Justice	3
MKTG 1100	Principles of Marketing	3	ECON 1101	Principles of Economics	3
MKTG 1130	Business Regulations and Compliance	3	MGMT 1100	Principles of Management	3
MKTG 1370	Consumer Behavior	3	MKTG 1100	Principles of Marketing	3
			MKTG 1130	Business Regulations and Compliance	3
			MKTG 1370	Consumer Behavior	3
				<b>Minimum Total Hours</b>	<b>18</b>
<b>Choose 4 hours from the following list of courses:</b>		<b>4</b>			
RELM 2042	Beginning Tennis	2			
RELM 2043	Weight Training	2			
RELM 2045	Beginning Golf	2			
RELM 2046	Volleyball	2			
<b>Occupationally-Related Electives:</b>					
MKTG 1280	Introduction to Sports and Recreation Management	3			
MKTG 2180	Principles of Sports Marketing	3			
MKTG 2280	Sports Management	3			
	<b>Minimum Total Hours</b>	<b>53</b>			

### SPORTS AND FITNESS MANAGEMENT SPECIALIST (SAF1)

Technical Certificate of Credit  
Effective Spring 2018 (201814)

Graduates of the Sports and Fitness Management Specialist technical certificate program will qualify for careers in local parks and recreation agencies, campus sports activities, and varied sports venues.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins   Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/SAF1](http://www.centralgatech.edu/gainfulemployment/SAF1)

		Credit Hours
MKTG 1280	Introduction to Sports and Recreation Management	3
MKTG 2180	Principles of Sports Marketing	3
or MKTG 1100	Principles of Marketing	(3)
MKTG 2280	Sports Management	3
RELM xxxx	Sports and Fitness Management Elective	6
XXXX xxxx	Occupationally-Related Elective(s)	3

#### Sports and Fitness Management Electives:

RELM 2020	Recreation Leadership and Supervision	3
RELM 2030	Sports and Fitness Facility Management and Design	3
RELM 2040	Program Planning in Sports and Fitness	3
RELM 2042	Beginning Tennis	2
RELM 2043	Weight Training	2
RELM 2045	Beginning Golf	2
RELM 2046	Volleyball	2

#### Occupationally-Related Electives:

ACCT 1100	Financial Accounting I	4
ACCT 1120	Spreadsheet Applications	4
ACCT 2140	Legal Environment of Business	3
BUSN 1190	Digital Technologies in Business	2
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 1430	Desktop Publishing and Presentation Applications	4

# WEBSITE DESIGN/ DEVELOPMENT

## WEBSITE DESIGN/DEVELOPMENT (IS53)

Associate Degree

Provides 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 website designers.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | Online

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - English/Humanities/Fine Arts</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program-Specific Requirement	
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>36</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1220 Structured Query Language (SQL)	4
or CIST 1305 Program Design and Development	(3)
CIST 1510 Web Development I	3
CIST 1520 Scripting Technologies	3
CIST 1530 Web Graphics I	3
CIST 1601 Information Security Fundamentals	3
CIST 2510 Web Technologies	3
CIST 2531 Web Graphics II	3
CIST 2550 Web Development II	3
CIST 2921 IT Analysis, Design, and Project Management	4
CIST 2950 Web Systems Project	3
or CIST 2991 Internship I	3
CIST xxxx CIST Elective(s)	3
Choose one of the following programming courses:	
CIST 2311 Visual Basic I	4
CIST 2341 C# Programming I	4
CIST 2351 PHP Programming I	4
CIST 2371 Java Programming I	4
CIST 2381 Mobile Application Development	4
CIST 2560 Web Application Programming I	4

CIST 2570 Open Source Web Application Programming I	4
CIST 2580 Interactive & Social Apps Integration	4

### CIST Electives:

CIST 1101 Working with Microsoft Windows	3
CIST 1102 Keyboarding	3
CIST 1141 Network + Preparation	4
CIST 1180 Advanced Topics in Operating Systems	3
CIST 1200 Database Management	4
CIST 1210 Introduction to Oracle Databases	4
CIST 1220 Structured Query Language	4
CIST 1540 Web Animation I	3
CIST 1601 Information Security Fundamentals	3
CIST 1602 Security Policies and Procedures	3
CIST 2122 A+ Preparation	3
CIST 2129 Comprehensive Database Techniques	4
CIST 2130 Desktop Support Concepts	3
CIST 2126 Comprehensive Presentation and Email	3
CIST 2127 Comprehensive Word Processing Techniques	3
CIST 2128 Comprehensive Spreadsheet Techniques	3
CIST 2212 Oracle Database Administration I	4
CIST 2214 Oracle Database Administration II	4
CIST 2216 Oracle Advanced Topics	4
CIST 2222 Administering Microsoft SQL Server	4
CIST 2224 Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311 Visual Basic Programming I	4
CIST 2312 Visual Basic Programming II	4
CIST 2313 Visual Basic Programming III	4
CIST 2341 C# Programming I	4
CIST 2342 C# Programming II	4
CIST 2343 C# Programming III	4
CIST 2361 C++ Programming I	4
CIST 2362 C++ Programming II	4
CIST 2371 Java Programming I	4
CIST 2372 Java Programming II	4
CIST 2373 Java Programming III	4
CIST 2351 PHP Programming	4
CIST 2352 PHP Programming II	4
CIST 2381 Mobile Application Development	4
CIST 2412 IMicrosoft Server Directory Services	4
CIST 2413 Microsoft Server Infrastructure	4
CIST 2420 Microsoft Exchange Server	4
CIST 2431 UNIX/Linux Introduction	4
CIST 2432 UNIX/Linux Server	4
CIST 2433 UNIX/Linux Advanced Server	4
CIST 2434 UNIX/Linux Scripting	4
CIST 2441 Cisco Networking for Home and Small Business	4
CIST 2442 CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443 CISCO Routing and Switching	4
CIST 2444 CISCO Designing and Supporting Computer Networks	4
CIST 2453 Cisco Scaling Networks	4
CIST 2454 Cisco Connecting Networks	4
CIST 2455 CISCO CCNA Security	4
CIST 2471 CCNP ROUTE: Implementing IP Routing	4
CIST 2472 CCNP SWITCH: Implementing IP Switching	4
CIST 2473 CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510 Web Technologies	3
CIST 2531 Web Graphics II	3
CIST 2541 Web Animation II	3
CIST 2550 Web Development II	3
CIST 2561 Web Application Programming II	4

CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>64</b>

## WEBSITE DESIGN/DEVELOPMENT (IS64)

### Diploma

Provides students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as website designers.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins   Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/IS64](http://www.centralgatech.edu/gainfulemployment/IS64)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Occupational Courses</b>	<b>46</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1220 Structured Query Language	4
or CIST 1305 Program Design and Development	3
CIST 1510 Web Development I	3
CIST 1520 Scripting Technologies	3
CIST 1530 Web Graphics I	3
CIST 1601 Information Security Fundamentals	3
CIST 2510 Web Technologies	3
CIST 2531 Web Graphics II	3
CIST 2550 Web Development II	3
CIST 2921 IT Analysis, Design, and Project Management	4
CIST xxxx CIST Elective(s)	3
Choose one of the following programming courses:	
CIST 2311 Visual Basic I	4
CIST 2341 C# Programming I	4
CIST 2351 PHP Programming I	4
CIST 2371 Java Programming I	4
CIST 2381 Mobile Application Development	4

CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
<b>CIST Electives:</b>		
CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1141	Network + Preparation	4
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1210	Introduction to Oracle Databases	4
CIST 1220	Structured Query Language	4
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 1602	Security Policies and Procedures	3
CIST 2122	A+ Preparation	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2212	Oracle Database Administration I	4
CIST 2214	Oracle Database Administration II	4
CIST 2216	Oracle Advanced Topics	4
CIST 2222	Administering Microsoft SQL Server	4
CIST 2224	Designing and Implementing Databases with Microsoft SQL Server	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2420	Microsoft Exchange Server	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3

CIST 2561	Web Application Programming II	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2571	Open Source Web Application Programming II	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2991	Internship I	3
	<b>Total Hours</b>	<b>54</b>



# INFORMATION TECHNOLOGY TECHNICAL CERTIFICATES

## ADVANCED COMP TIA A+ CERTIFIED TECHNICIAN PREPARATION (AC91)

Technical Certificate of Credit

Prepares students for the CompTIA A+ certification exam. This program includes advanced level topics and study skills preparation for the CompTIA A+ certification exam. Students completing this certificate will be prepared for entry-level positions including IT technician, PC technician, and PC support specialist.

### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

	Credit Hours
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 2122 A+ Preparation	3
<b>Total Hours</b>	<b>10</b>

## ADVANCED COMPUTER TIA A+ CERTIFIED TECHNICIAN (MO21)

Technical Certificate of Credit

Prepares students for the CompTIA A+ Certification exam. The certificate includes advanced level topics and study skills preparation for the CompTIA A+ Certification exam. Students completing this certificate will be prepared for entry-level positions including IT technician, PC technician, and PC support specialist.

### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

	Credit Hours
CIST 1122 Hardware Installation and Maintenance	4
CIST 2122 A+ Preparation	3
CIST XXXX CIST Elective	3
ENGL 1010 Fundamentals of English I	3

### CIST Electives:

CIST 1220 Structured Query Language (SQL)	4
CIST 1305 Program Design and Development	3
CIST 1401 Computer Networking Fundamentals	4
CIST 1510 Web Development I	3
CIST 1520 Scripting Technologies	3
CIST 1530 Web Graphics I	3
CIST 1601 Information Security Fundamentals	3
CIST 2127 Comprehensive Word Processing Techniques	3
CIST 2128 Comprehensive Spreadsheet Techniques	3
CIST 2130 Desktop Support Concepts	3
CIST 2311 Visual Basic Programming I	4

CIST 2312 Visual Basic Programming II	4
CIST 2313 Visual Basic Programming III	4
CIST 2341 C# Programming I	4
CIST 2371 Java Programming I	4
CIST 2372 Java Programming II	4
CIST 2373 Java Programming III	4
CIST 2411 Microsoft Client	4
CIST 2412 Microsoft Server Directory Services	4
CIST 2413 Microsoft Server Infrastructure	4
CIST 2414 Microsoft Server Administrator	4
CIST 2451 Introduction to Networks - Cisco	4
CIST 2452 Cisco Routing and Switching Essentials	4
CIST 2453 Cisco Scaling Networks	4
CIST 2454 Cisco Connecting Networks	4
CIST 2455 CISCO CCNA Security	4
CIST 2510 Web Technologies	3
CIST 2531 Web Graphics II	3
CIST 2550 Web Development II	3
CIST 2921 IT Analysis, Design, and Project Management	4
<b>Total Hours</b>	<b>13</b>

## CISCO CCNP NETWORK SPECIALIST (CD71)

Technical Certificate of Credit

Provides career oriented, comprehensive coverage of enterprise-level networking skills, including advanced routing, switching, and troubleshooting while providing opportunities for hands-on practical experience and soft-skills development. These courses prepare students for the globally-recognized Cisco CCNP certification. CCNP provides a next step for Cisco CCNA discovery or CCNA exploration students seeking to build on their CCNA skill sets to further a career in networking.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

	Credit Hours
CIST 2471 CCNP ROUTE: Implementing IP Routing	4
CIST 2472 CCNP SWITCH: Implementing IP Switching	4
CIST 2473 CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
<b>Total Hours</b>	<b>12</b>

## CISCO NETWORK SPECIALIST (CN71)

Technical Certificate of Credit

Teaches how to build, maintain, and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   VECTR   Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CN71](http://www.centralgatech.edu/gainfulemployment/CN71)

Credit

		Hours
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
<b>Total Hours</b>		<b>16</b>

### CISCO NETWORK SPECIALIST (MO51)

Technical Certificate of Credit

Teaches how to build, maintain and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

		Credit Hours
CIST 2451	Introduction to Networks - CISCO	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
MATH 1012	Foundations of Mathematics	3
<b>Total Hours</b>		<b>19</b>

### COMPTIA A+ CERTIFIED PREPARATION (CA61)

Technical Certificate of Credit

Provides computer users with the basic entry-level skills working toward CompTia A+ certification.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

		Credit Hours
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
or CIST 1135	Operating Systems and Virtual-Cloud Computing	(3)
<b>Total Hours</b>		<b>10</b>

### COMP TIA A+ CERTIFIED PREPARATION (MC51)

Technical Certificate of Credit

Provides computer users with the basic entry-level skills working toward CompTia A+ certification.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

Credit

		Hours
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computer Literacy	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
<b>Total Hours</b>		<b>13</b>

### COMPTIA A+ CERTIFIED TECHNICIAN PREPARATION (CA71)

Technical Certificate of Credit

Provides 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CA71](http://www.centralgatech.edu/gainfulemployment/CA71)

		Credit Hours
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
or CIST 1135	Operating Systems and Virtual-Cloud Computing	(3)
CIST xxxx	CIST elective(s)	4

#### CIST Electives:

CIST 1220	Structured Query Language (SQL)	4
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1601	Information Security Fundamentals	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2130	Desktop Support Concepts	3
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2411	Microsoft Client	4
CIST 2412	IMicrosoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3

CIST 2550	Web Development II	3
CIST 2921	IT Analysis, Design, and Project Management	4
<b>Total Hours</b>		<b>18</b>

### COMPUTER HARDWARE SPECIALIST (CH11)

Technical Certificate of Credit

Enhances skills for students in the PC support field. The program builds on the student's computer knowledge and existing skill base. The student's skill base is enhanced with hands-on lab work incorporated in courses on operating systems, hardware maintenance, and networking.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

		Credit Hours
CIST 1130	Operating Systems Concepts	3
or CIST 1135	Operating Systems and Virtual-Cloud Computing	(3)
CIST 1122	Hardware Installation and Maintenance	4
CIST 1401	Computer Networking Fundamentals	4
or CIST 2451	Introduction to Networks - Cisco	(4)
<b>Total Hours</b>		<b>11</b>

### FOUNDATIONS OF COMPUTER PROGRAMMING (FF41)

Technical Certificate of Credit

Provides an introduction to computer programming. Instruction covers basic operating systems, programming concepts, structured programming, and problem solving.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

		Credit Hours
CIST 1001	Computer Concepts	4
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
CIST 2371	Java Programming I	4
<b>Total Hours</b>		<b>15</b>

### HELP DESK SPECIALIST (HD41)

Technical Certificate of Credit

Teaches how to maintain and troubleshoot computer hardware and software, and be a support person to handle calls from customers.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HD41](http://www.centralgatech.edu/gainfulemployment/HD41)

		Credit Hours
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
or CIST 1135	Operating Systems and Virtual-Cloud Computing	(3)
CIST 2130	Desktop Support Concepts	3
CIST 1401	Computer Networking Fundamentals	4
or CIST 2441	Cisco Networking for Home and Small Businesses	(4)
or CIST 2451	Introduction to Networks - Cisco	(4)
CIST xxxx	CIST Elective(s)	4
<b>CIST Electives:</b>		
CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1200	Database Management	4
CIST 1305	Program Design and Development	3
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3

CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>25</b>

**HELP DESK SPECIALIST (MOH1)**

Technical Certificate of Credit

Teaches how to maintain and troubleshoot computer hardware and software, and be a support person to handle calls from customers.

**Education Requirements**

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
MATH 1012	Foundations of Mathematics	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Desktop Support Concepts	3
CIST 2130	Desktop Support Concepts	3
CIST 1401	Computer Networking Fundamentals	4
or CIST 2441	Cisco Networking for Home and Small Business	4
or CIST 2451	Introduction to Networks - CISCO	4
CIST XXXX	CIST Elective(s)	4

**CIST Electives:**

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1220	Structured Query Language (SQL)	4
CIST 1305	Program Design and Development	3
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4

CIST 2343	C# Programming III	4
CIST 2351	PHP Programming	4
CIST 2352	PHP Programming II	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>28</b>

**JAVA PROGRAMMER (JP11)**

Technical Certificate of Credit

Provides the opportunity for students and IT professionals to add Java program language skills and object oriented programming skills to their IT knowledge base.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/JP11](http://www.centralgatech.edu/gainfulemployment/JP11)

CIST 1220	Structured Query Language (SQL)	<b>Credit Hours</b> 4
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CIST 1305	Program Design and Development	3
CIST 1510	Web Development I	3
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST xxxx	CIST Elective(s)	4

**CIST Electives:**

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2351	PHP Programming I	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2373	Java Programming III	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
<b>Total Hours</b>		<b>22</b>

**JAVA PROGRAMMER (MOJ1)**

Technical Certificate of Credit

Provides the opportunity for students and IT professionals to add Java program language skills and object oriented programming skills to their IT knowledge base. Completers of this certificate are Java Programmers.

**Education Requirements**

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

	<b>Credit Hours</b>
ENGL 1010 Fundamentals of English I	3
CIST 1210 Introduction to Oracle Databases or CIST 1220 Structured Query Language (SQL)	4
CIST 1305 Program Design and Development	3
CIST 1510 Web Development I	3
CIST 2371 Java Programming I	4
CIST 2372 Java Programming II	4
CIST XXXX CIST Elective(s)	4

**CIST Electives:**

CIST 2311 Visual Basic Programming I	4
CIST 2341 C# Programming I	4
CIST 2351 PHP Programming	4
CIST 2361 C++ Programming I	4
CIST 2371 Java Programming I	4
CIST 2381 Mobile Application Development	4
CIST 2580 Interactive & Social Apps Integration	4
<b>Total Hours</b>	<b>25</b>

**LINUX/UNIX SYSTEM ADMINISTRATOR (MO31)**

Technical Certificate of Credit

Trains students in the skills needed to design, build, and maintain UNIX/Linux networks.

**Education Requirements**

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

	<b>Credit Hours</b>
CIST 2431 UNIX/Linux Introduction	4
CIST 2432 UNIX/Linux Server	4
CIST 2433 UNIX/Linux Advanced Server	4
CIST 2434 UNIX/Linux Scripting	4
MATH 1012 Foundations of Mathematics	3
<b>Total Hours</b>	<b>19</b>

**MICROSOFT EXCEL APPLICATION SPECIALIST (ME21)**

Technical Certificate of Credit

Provides students with the knowledge and skills to perform intermediate and advanced Microsoft Excel. Prepares students with the skills necessary to obtain the expert user certification.

**Education Requirements**

<b>Admission:</b>	None
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**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST xxxx	CIST Elective(s)	3
<b>CIST Electives:</b>		
CIST 1001	Computer Concepts	4
CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1135	Operating Systems and Virtual-Cloud Computing	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1220	Structured Query Language (SQL)	4
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2126	Comprehensive Presentation and Email	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2351	PHP Programming I	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2361	C++ Programming I	4
CIST 2362	C++ Programming II	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2420	Microsoft Exchange Server	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2510	Web Technologies	3

CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
<b>Total Hours</b>		<b>9</b>

### MICROSOFT NETWORK ADMINISTRATION (MO11)

Technical Certificate of Credit

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.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

		<b>Credit Hours</b>
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
MATH 1012	Foundations of Mathematics	3
<b>Total Hours</b>		<b>19</b>

### MICROSOFT NETWORKING ADMINISTRATOR (MS11)

Technical Certificate of Credit

Provides training in Microsoft networking and prepares students for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking infrastructure. This program prepares students to sit for the Microsoft Certified Professional (MCP) Networking Exam. Hands-on labs provide students with real world simulations.

**Conditional Program Admission:** Student must demonstrate proficiency in network fundamentals to enroll in this program.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville |

Warner Robins

**Gainful Employment:**  
[www.centralgatech.edu/gainfulemployment/MS11](http://www.centralgatech.edu/gainfulemployment/MS11)

		Credit Hours
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
<b>Total Hours</b>		<b>16</b>

### MICROSOFT WORD APPLICATION SPECIALIST (MW11)

Technical Certificate of Credit

Provides students with the knowledge and skills to perform intermediate Microsoft Word and prepare them to sit for the Microsoft User Certification Exam.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Warner Robins | Macon YDC

		Credit Hours
COMP 1000	Introduction to Computer Literacy	3
CIST 1102	Keyboarding	3
or BUSN 1100	Introduction to Keyboarding	(3)
CIST 2127	Comprehensive Word Processing Techniques	3
<b>Total Hours</b>		<b>9</b>

### NETWORK ADMINISTRATOR (NA21)

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. The student is prepared to take the MCP (Microsoft Certified Professional) exam.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

**Gainful Employment:**  
[www.centralgatech.edu/gainfulemployment/NA21](http://www.centralgatech.edu/gainfulemployment/NA21)

		Credit Hours
COMP 1000	Introduction to Computer Literacy	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation and Maintenance	4
CIST 1130	Operating Systems Concepts	3
or CIST 1135	Operating Systems and Virtual-Cloud Computing	(3)
CIST 2411	Microsoft Client	4
CIST 2414	Microsoft Server Administrator	4
CIST xxxx	CIST elective(s)	4

Choose one of the following courses:

CIST 1401	Computer Networking Fundamentals	4
CIST 2441	Cisco Networking for Home and Small Businesses	(4)
CIST 2451	Introduction to Networks - Cisco	(4)

#### CIST Electives:

CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2343	C# Programming III	4
CIST 2351	PHP Programming	4
CIST 2361	C++ Programming I	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2373	Java Programming III	4
CIST 2381	Mobile Application Development	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2473	CCNP TSHOOT: Maintaining and Troubleshooting IP Networks	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
<b>Total Hours</b>		<b>30</b>

### NETWORK TECHNICIAN (MON1)

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.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	<b>Credit Hours</b>
MATH 1012 Foundations of Mathematics	3
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1130 Operating Systems Concepts	3
CIST 1401 Computer Networking Fundamentals	4
or CIST 2451 Introduction to Networks - CISCO	(4)
<b>Minimum Total Hours</b>	<b>13</b>

### NETWORK TECHNICIAN (NT41)

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.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
COMP 1000 Introduction to Computer Literacy	3
CIST 1001 Computer Concepts	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 1401 Computer Networking Fundamentals	4
or CIST 2451 Introduction to Networks - Cisco	(4)
<b>Total Hours</b>	<b>14</b>

### PC REPAIR AND NETWORK TECHNICIAN (PR21)

Technical Certificate of Credit

Prepares the student with the skills needed to perform personal computer troubleshooting and repair.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PR21](http://www.centralgatech.edu/gainfulemployment/PR21)

	<b>Credit Hours</b>
CIST 1001 Computer Concepts	4
CIST 1122 Hardware Installation and Maintenance	4
CIST 1130 Operating Systems Concepts	3
or CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 1401 Networking Fundamentals	4

or CIST 2451 Introduction to Networks - Cisco (4)  
 COMP 1000 Introduction to Computer Literacy 3  
**Total Hours 18**

### WEB SITE DESIGNER (IS41)

Technical Certificate of Credit

Provides skills for creating, maintaining, and updating standard web sites. These skills include HTML and JavaScript language development, web page design techniques, and graphic development and manipulation. The purpose of this certificate is to provide training opportunities for persons employed in the computer industry or have been trained in a related computer area and wish to upgrade their skills with advanced courses.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/IS41](http://www.centralgatech.edu/gainfulemployment/IS41)

	<b>Credit Hours</b>
CIST 1305 Program Design and Development	3
CIST 1510 Web Development I	3
CIST 1530 Web Graphics I	3
CIST 1601 Information Security Fundamentals	3
CIST 2510 Web Technologies	3
CIST xxxx CIST Elective(s)	9

#### CIST Electives:

CIST 1001 Computer Concepts	4
CIST 1101 Working with Microsoft Windows	3
CIST 1102 Keyboarding	3
CIST 1122 Hardware Installation and Maintenance	4
CIST 1135 Operating Systems and Virtual-Cloud Computing	3
CIST 1180 Advanced Topics in Operating Systems	3
CIST 1401 Computer Networking Fundamentals	4
CIST 1540 Web Animation I	3
CIST 2122 A+ Preparation	3
CIST 2127 Comprehensive Word Processing Techniques	3
CIST 2128 Comprehensive Spreadsheet Techniques	3
CIST 2129 Comprehensive Database Techniques	4
CIST 2130 Desktop Support Concepts	3
CIST 2311 Visual Basic Programming I	4
CIST 2312 Visual Basic Programming II	4
CIST 2313 Visual Basic Programming III	4
CIST 2341 C# Programming I	4
CIST 2342 C# Programming II	4
CIST 2351 PHP Programming I	4
CIST 2452 Cisco Routing and Switching Essentials	4
CIST 2361 C++ Programming I	4
CIST 2371 Java Programming I	4
CIST 2372 Java Programming II	4
CIST 2381 Mobile Application Development	4
CIST 2411 Microsoft Client	4
CIST 2412 IMicrosoft Server Directory Services	4
CIST 2413 Microsoft Server Infrastructure	4
CIST 2414 Microsoft Server Administrator	4
CIST 2420 Microsoft Exchange Server	4



CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2531	Web Graphics II	3
CIST 2541	Web Animation II	3
CIST 2550	Web Development II	3
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4
CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
CIST 2921	IT Analysis, Design, and Project Management	4
CIST 2991	Internship I	3
<b>Total Hours</b>		<b>24</b>

### WEB SITE DEVELOPER (ISE1)

Technical Certificate of Credit

Prepares the student to create and maintain professional, high-quality web sites. Program graduates will be competent in the technical areas of web design, including web graphic design, XHTML, scripting, web application server-side languages, database driven content, web project management, internet security, and mobile applications. Various software tools will be used throughout the curriculum including Microsoft Visual Studio, Adobe Web Suite and/or open source products. The purpose of this certificate is to provide training opportunities for persons already either already employed in the computer industry or have already been trained in a related computer area and wish to upgrade their skill with advanced courses and skills.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins Online

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ISE1](http://www.centralgatech.edu/gainfulemployment/ISE1)

	<b>Credit Hours</b>	
CIST 1220	Structured Query Language (SQL)	4
CIST 1305	Program Design and Development	3
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1601	Information Security Fundamentals	3

CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
CIST 2550	Web Development II	3
CIST xxxx	CIST Elective(s)	3

Choose one of the following programming courses:

CIST 2311	Visual Basic I	4
CIST 2341	C# Programming I	4
CIST 2351	PHP Programming I	4
CIST 2371	Java Programming I	4
CIST 2381	Mobile Application Development	4
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	4
CIST 2580	Interactive & Social Apps Integration	4

#### CIST Electives:

CIST 1001	Computer Concepts	4
CIST 1101	Working with Microsoft Windows	3
CIST 1102	Keyboarding	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1135	Operating Systems and Virtual-Cloud Computing	3
CIST 1180	Advanced Topics in Operating Systems	3
CIST 1401	Computer Networking Fundamentals	4
CIST 1540	Web Animation I	3
CIST 2122	A+ Preparation	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4
CIST 2130	Desktop Support Concepts	3
CIST 2311	Visual Basic Programming I	4
CIST 2312	Visual Basic Programming II	4
CIST 2313	Visual Basic Programming III	4
CIST 2341	C# Programming I	4
CIST 2342	C# Programming II	4
CIST 2351	PHP Programming I	4
CIST 2361	C++ Programming I	4
CIST 2371	Java Programming I	4
CIST 2372	Java Programming II	4
CIST 2381	Mobile Application Development	4
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST 2414	Microsoft Server Administrator	4
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4
CIST 2441	Cisco Networking for Home and Small Business	4
CIST 2442	CISCO Working at a Small-to-Medium Business or ISP	4
CIST 2443	CISCO Routing and Switching	4
CIST 2444	CISCO Designing and Supporting Computer Networks	4
CIST 2451	Introduction to Networks - Cisco	4
CIST 2452	Cisco Routing and Switching Essentials	4
CIST 2453	Cisco Scaling Networks	4
CIST 2454	Cisco Connecting Networks	4
CIST 2455	CISCO CCNA Security	4
CIST 2471	CCNP ROUTE: Implementing IP Routing	4
CIST 2472	CCNP SWITCH: Implementing IP Switching	4
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Network Security	4
CIST 2611	Implementing Internet/Intranet Firewalls	4

CIST 2612	Computer Forensics	3
CIST 2630	Computer Forensics and Data Identification	3
CIST 2631	Cyber Crime Technology	3
CIST 2632	Computer Forensic Project	3
<b>Total Hours</b>		<b>35</b>

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### INTRODUCTION TO WEB DESIGN (ITW1)

Technical Certificate of Credit

*Effective Spring 2018 (201814)*

The Introduction to Web Design technical certificate provides students the opportunity to develop basic computer skills while exploring web design software programs to create web-ready images and web pages. Topics include Microsoft Windows utilities, graphic image correction techniques, and conditional scripting statements and arrays.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

		<b>Credit Hours</b>
CIST 1510	Web Development I	3
CIST 1530	Web Graphics I	3
IST 2510	Web Technologies	3
<b>Total Hours</b>		<b>9</b>

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# Health Sciences

Biotechnology  
Cardiovascular Technology  
Clinical Laboratory Technology  
Dental Assisting  
Dental Hygiene  
Gerontology  
Hemodialysis Technology  
Medical Assisting  
Nursing  
Orthopedic Technology  
Paramedicine  
Pharmacy Technology  
Polysomnographic Technology  
Radiologic Technology  
Surgical Technology  
Veterinary Technology  
Health Sciences Technical Certificates of Credit

# COMPETITIVE SELECTION AND PROGRESSION

## Competitive Selection

Space for certain health science program cohorts is limited by the number of available clinical slots and/or the requirements of the program accrediting agency; therefore, a competitive selection process is employed to determine selection into these programs. Admission to CGTC and the competitive selection process are two distinct processes; students are responsible for understanding both. **Acceptance into the college does not guarantee selection into the student's desired health program.**

To be considered for selection for a seat in a competitive health science program, you must complete the following steps before the competitive selection deadline published for each program:

1. Complete all required courses for selection with a grade of C or higher.
2. Take the required entrance test for the program. The PSB Aptitude for Health Occupations is required for all health programs except the Associate of Science in Nursing (ASN) and the Practical Nursing programs, which require the Test of Essential Academic Skills (TEAS).
3. When you are ready to compete for a seat in your desired program cohort, submit a Competitive Health Selection form (the form is available online in the forms section of the Student Portal; go to [portal.centralgatech.edu](http://portal.centralgatech.edu), click Competitive Health Selection, complete the form, and click the Submit Application button once). A confirmation will be sent to your student email address. If you do not have access to the Student Portal, you may request a paper version of the form in the Admissions Office.
4. Wait for notification from CGTC's Admissions Office. Once selections are made, all applicants will be notified by phone and email of their acceptance or denial for admission into a competitive program.

### Competitive Selection Programs

- Associate of Science in Nursing (AN43)
- Cardiovascular Technology (CT13)
- Clinical Laboratory Technology (CLT3)
- Dental Assisting (DA12)
- Dental Hygiene (DH13)
- Echocardiography (EC23)
- Hemodialysis Technology (HT12)
- Medical Assisting (MA22)
- Medical Assisting (MA23)
- Orthopedic Technology (OT13)
- Pharmacy Technology (PT22)
- Practical Nursing (PN12)
- Radiologic Technology (RT23)
- Surgical Technology (ST12)

Complete information regarding the competitive selection process, including testing requirements, courses required for selection, estimated program costs, important deadlines, and more is included in the *Health Science Programs Competitive Selection* handbook, available online at [www.centralgatech.edu/competitiveselection](http://www.centralgatech.edu/competitiveselection). The booklet is also available in the Admissions Office or by emailing [healthselection@centralgatech.edu](mailto:healthselection@centralgatech.edu).

Students interested in competing for a seat in a competitive selection program are encouraged to review trend data for the program. The average number of students selected to each program, highest and lowest test scores and GPAs, and highest and lowest total selection scores for past cohorts is available at [www.centralgatech.edu/competitiveselection](http://www.centralgatech.edu/competitiveselection).

## Progression Requirements

**Students are subject to a background check and/or drug screening based on the respective clinical/medical facility's requirements. If the clinical/medical facility finds the student's background check or drug screening to be unsatisfactory, the student will be prohibited from participating in clinical activities and will be unable to complete his/her program of study.**

**Successful** completion of a course requires that students receive a passing grade. It is vital to the success of the students to maintain passing grades in all courses for all programs. To pass, students must make an **A, B, or C** in each course taken.

A	90-100	4.00
B	80-89	3.00
C	70-79	2.00

Unsuccessfully completing a course would mean any grade of D, F, U, W, WP or WF.

D	60-69	1.00
F	0-59	0
WF		0

Should a student receive an unsuccessful grade in any course work, in any Health Science program, he or she may be suspended from that program.

Students wishing to re-enter a Health Science program after suspension must submit an application for readmission by the deadline date for each semester. Students wishing to return into an upper level course will be selected on space availability and grade point average from all courses that apply to that particular major.

**WITHDRAWAL FROM ANY COURSE AT ANY LEVEL MAY AFFECT PROGRESSION IN YOUR CHOSEN PROGRAM OF STUDY.**

## BIOTECHNOLOGY

### BIOTECHNOLOGY (BI23)

Associate Degree

*Effective Summer 2018 (201816)*

Meets the increasing demand for skilled technicians in biotechnology. Graduates will be prepared for employment in research and processing environments. Examples include biotechnical, biomedical, food, agricultural, pharmaceutical, environmental and chemical laboratories and processing environments, plus manufacturing quality control laboratories and the health industry.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon  
**Competitive Selection:**No

#### General Education Core Courses

	Credit Hours
<b>Area I - Language Arts/Communication</b>	<b>15</b>
ENGL 1101 Composition and Rhetoric	3
ENGL 1105 Workplace and Technical Communications	3

#### Area II - Social/Behavioral Sciences

XXXX xxxx Social/Behavioral Sciences Elective	3
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#### Area III - Natural Sciences/Mathematics

MATH XXXX Mathematics Elective	3
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*(General Education Electives can be found on page 56)*

#### Area IV - Humanities/Fine Arts

XXXX xxxx Humanities/Fine Arts Elective	3
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#### Occupational Courses

COMP 1000 Introduction to Computer Literacy	3
BIOL 1111 Biology I	3
and BIOL 1111L Biology Lab I	1
- OR	
BIOL 2113 Anatomy and Physiology I	(3)
and BIOL 2113L Anatomy and Physiology Lab I	(1)
BIOL 2117 Introductory Microbiology	3
BIOL 2117L Introductory Microbiology Lab	1
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
CHEM 1212 Chemistry II	3
CHEM 1212L Chemistry Lab II	1
BUSN 1410 Spreadsheet Concepts and Applications	4
BTEC 1010 Introduction to Biotechnology	2
BTEC 2010 Biotechnology Math Applications	5
BTEC 2050 Biotech Lab Methods and Techniques	5
BTEC 2100 Cell Culture	4
BTEC 2105 Organic and Biochemistry	4
BTEC 2110 Bioprocessing/Production	4
BTEC 2150 Molecular Biology	4
BTEC 2300 Environmental Technology	4
BTEC 2500 Biotechnology Internship	3
<b>Total Hours</b>	<b>73</b>

### BIOTECHNOLOGY (BI23)

Associate Degree

*Prior to Summer 2018 (201816)*

Meets the increasing demand for skilled technicians in biotechnology. Graduates will be prepared for employment in research and processing environments. Examples include biotechnical, biomedical, food, agricultural, pharmaceutical, environmental and chemical laboratories and processing environments, plus manufacturing quality control laboratories and the health industry.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon  
**Competitive Selection:**No

#### General Education Core Courses

	Credit Hours
<b>Area I - Language Arts/Communication</b>	<b>15</b>
ENGL 1101 Composition and Rhetoric	3
ENGL 1105 Workplace and Technical Communications	3

#### Area II - Social/Behavioral Sciences

XXXX xxxx Social/Behavioral Sciences Elective	3
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#### Area III - Natural Sciences/Mathematics

MATH 1111 College Algebra	3
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#### Area IV - Humanities/Fine Arts

XXXX xxxx Humanities/Fine Arts Elective	3
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#### Occupational Courses

COMP 1000 Introduction to Computer Literacy	3
BIOL 1111 Biology I	3
BIOL 1111L Biology Lab I	1
BIOL 2117 Introductory Microbiology	3
BIOL 2117L Introductory Microbiology Lab	1
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
CHEM 1212 Chemistry II	3
CHEM 1212L Chemistry Lab II	1
BUSN 1410 Spreadsheet Concepts and Applications	4
BTEC 1010 Introduction to Biotechnology	2
BTEC 2010 Biotechnology Math Applications	5
BTEC 2050 Biotech Lab Methods and Techniques	5
BTEC 2100 Cell Culture	4
BTEC 2105 Organic and Biochemistry	4
BTEC 2110 Bioprocessing/Production	4
BTEC 2150 Molecular Biology	4
BTEC 2300 Environmental Technology	4
BTEC 2500 Biotechnology Internship	3
<b>Total Hours</b>	<b>73</b>

**BIOTECHNOLOGY LABORATORY ASSISTANT (BLA1)**

Technical Certificate of Credit  
*Effective Summer 2018 (201816)*

Introduces students to the fields of biological and chemical technology to prepare for employment in research, industrial, and medical laboratory environments. The curriculum is embedded into CGTC's existing institutionally developed Biotechnology AAS program.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:**  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

	<b>Credit Hours</b>
BIOL 1111 Biology I	3
and BIOL 1111L Biology Lab I	1
- OR	
BIOL 2113 Anatomy and Physiology I	(3)
and BIOL 2113L Anatomy and Physiology Lab I	(1)
MATH XXXX Mathematics Elective	3
<i>(General Education Electives can be found on page 56)</i>	
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
BTEC 1010 Introduction to Biotechnology	2
BTEC 2010 Biotechnology Math Applications	5
BTEC 2050 Biotech Lab Methods and Techniques	5
<b>Total Hours</b>	<b>23</b>

**BIOTECHNOLOGY LABORATORY ASSISTANT (BLA1)**

Technical Certificate of Credit  
*Prior to Summer 2018 (201816)*

Introduces students to the fields of biological and chemical technology to prepare for employment in research, industrial, and medical laboratory environments. The curriculum is embedded into CGTC's existing institutionally developed Biotechnology AAS program.

**Education Requirements**

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/BLA1](http://www.centralgatech.edu/gainfulemployment/BLA1)

	<b>Credit Hours</b>
BIOL 1111 Biology I	3
BIOL 1111L Biology Lab I	1
MATH 1111 College Algebra	3
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
BTEC 1010 Introduction to Biotechnology	2
BTEC 2010 Biotechnology Math Applications	5
BTEC 2050 Biotech Lab Methods and Techniques	5
<b>Total Hours</b>	<b>23</b>

## CARDIOVASCULAR TECHNOLOGY

### CARDIOVASCULAR TECHNOLOGY (CT13)

Associate Degree

Provides educational opportunities to individuals in didactic and clinical environments that will enable them to obtain skills, knowledge and attitudes necessary to graduate and become a successful entry-level cardiovascular invasive specialist. The cardiovascular technology profession is centered on the evaluation, diagnosis, and treatment of patients with cardiac diseases. A cardiovascular technologist performs examinations at the request or under direct supervision of a physician, is proficient in the use of analytical equipment, and provides a foundation of data from which a correct anatomic and physiologic diagnosis may be made.

#### Academic Progress

Cardiovascular Technology students must pass all courses each semester with a grade of a C or above and maintain a GPA of a 2.0 or higher in order to progress to the next semester and remain on track. Those who receive a grade below a C on any course may remove themselves from the track progression in the program and may have to wait until the course is offered again (usually the next year) to apply to repeat the course. Admission back into the program is dependent upon space available at the time the course is offered.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Spring  
**Location(s) Offered:** Macon  
**Competitive Selection:** Yes

	Credit Hours
<b>General Education Core Courses</b>	<b>19</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
MATH 1127 Introduction to Statistics	3
PHYS 1110 Conceptual Physics	3
PHYS 1110L Conceptual Physics Lab	1
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Core Courses</b>	<b>8</b>
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
<b>Occupational Courses</b>	<b>43</b>
CAVT 1002 Medical Physics	2
CAVT 1020 Cardiac Catheterization I	4
CAVT 1021 Cardiac Catheterization Clinical I (Introduction to the Clinical Environment)	3
CAVT 1030 Electrophysiology and Cardiac Anatomy	3
CAVT 1080 Advanced Hemodynamics and Cardiac Physiology	3

CAVT 1090 Drug Calculations and Administration	2
CAVT 1100 Cardiac Catheterization Fundamentals	3
CAVT 2020 Cardiac Catheterization II	4
CAVT 2030 Cardiac Catheterization Clinical II	6
CAVT 2050 Cardiac Catheterization Clinical III	11
CAVT 2070 Cardiac Catheterization Registry Review I	2
<b>Minimum Total Hours</b>	<b>70</b>

### ECHOCARDIOGRAPHY (EC23)

Associate Degree

Prepares students for work in the allied health field as echocardiographers. The program offers both clinical and didactic instruction. Upon completion of this program, the student is eligible to sit for a national certification examination.

#### Academic Progress

Echocardiography students must pass all courses each semester with a grade of a "C" or above and maintain a GPA of a 2.0 or higher in order to progress to the next semester and remain on track. Those who receive a grade below a "C" on any course, may remove themselves from the track progression in the program and may have to wait until the course is Offered: again (usually the next year) to apply to repeat the course. Admission back into the program is dependent upon space available at the time the course is Offered.

Consult <http://www.centralgatech.edu/studserv/registrar/PSB/default.cfm> for more detailed information on the Competitive Selection and Application process.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Spring  
**Location(s) Offered:** Macon  
**Competitive Selection:** Yes

	Credit Hours
<b>General Education Core Courses</b>	<b>19</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
MATH 1127 Introduction to Statistics	3
PHYS 1110 Conceptual Physics	3
PHYS 1110L Conceptual Physics Lab	1
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Core Courses</b>	<b>8</b>
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
<b>Occupational Courses</b>	<b>43</b>
ECHO 2310 Pediatric Echocardiography	3
or CAVT 1080 Advanced Hemodynamics and Cardiac Physiology	(3)
CAVT 1030 Electrophysiology and Cardiac Anatomy	3



CAVT 1090	Drug Calculations and Administration	2
DMSO 1040	Sonographic Physics and Instrumentation	3
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	1
ECHO 1100	Echocardiography Fundamentals	3
ECHO 1310	Echocardiography I	3
ECHO 1320	Echocardiography II	3
ECHO 1370	Echocardiography Clinical I	7
- OR		
ECHO 1371	Echocardiography Clinical I (Part A)	(4)
and ECHO 1372	Echocardiography Clinical I (Part B)	(3)
ECHO 2360	Echocardiography Clinical II	7
- OR		
ECHO 2361	Echocardiography Clinical II (Part A)	(4)
and ECHO 2362	Echocardiography Clinical II (Part B)	(3)
ECHO 2370	Echocardiography Clinical III	10
ECHO 2400	Comprehensive Registry Review	1
<b>Minimum Total Hours</b>		<b>73</b>

### ELECTROCARDIOGRAPHY TECHNOLOGY (ET81)

Technical Certificate of Credit

Provides students with the workplace skills necessary to perform and evaluate 12-lead electrocardiographs and telemetry surveillance in hospitals and cardiology offices in order to assist physicians in the diagnosis and monitoring of the heart. Students will be provided an in-depth knowledge of principles, practices, standards, and techniques used in the work place. Students will be able to demonstrate skills in accordance with the policies and procedures in the following areas: basic cardiovascular anatomy and physiology, ECG techniques and recognition, and electrophysiology.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon
<b>Competitive Selection:</b>	No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ET81](http://www.centralgatech.edu/gainfulemployment/ET81)

		Credit Hours
ALHS 1011	Structure and Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
ECGT 1030	Introduction to Electrocardiography	5
ECGT 1050	Electrocardiography Practicum	5
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
<b>Total Hours</b>		<b>26</b>

# CLINICAL LABORATORY TECHNOLOGY

## CLINICAL LABORATORY TECHNOLOGY (CLT3)

Associate Degree

Teaches students to perform clinical laboratory procedures under the supervision of a qualified pathologist and/or clinical laboratory scientist. Classroom training is integrated with clinical experiences under the medical direction of cooperating hospitals. Graduation from this program allows students to take a national certification examination which is necessary for clinical employment. Employment in doctors' offices and hospital laboratories requires a minimum of an associate degree in this field.

The Clinical Laboratory Technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS):  
5600 N. River Road  
Suite 720  
Rosemont, IL 60018  
Phone: 773-714-8880  
Website: www.naacls.org

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Spring
<b>Location(s) Offered:</b>	Warner Robins
<b>Competitive Selection:</b>	Yes

### General Education Core Courses

*Area I - Language Arts/Communication*  
ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*  
PSYC 1101 Introduction to Psychology 3

*Area III - Natural Sciences/Mathematics*  
Choose one of the following Math courses:  
MATH 1111 College Algebra 3  
or MATH 1101 Mathematical Modeling (3)  
CHEM 1211 Chemistry I 3  
CHEM 1211L Chemistry Lab I 1

*Area IV - Humanities/Fine Arts*  
XXXX xxxx Humanities/Fine Arts Elective 3

### Program-Specific Requirement

BIOL 2117 Introductory Microbiology 3  
and BIOL 2117L Introductory Microbiology Lab 1

Choose one of the following courses:  
ENGL 1102 Literature and Composition 3  
ENGL 1105 Workplace and Technical Communications 3  
SPCH 1101 Public Speaking 3  
CHEM 1212 Chemistry II 3  
and CHEM 1212L Chemistry Lab II 1

### Occupational Core Courses 8

BIOL 2113 Anatomy and Physiology I 3  
BIOL 2113L Anatomy and Physiology Lab I 1  
BIOL 2114 Anatomy and Physiology II 3  
BIOL 2114L Anatomy and Physiology Lab II 1

### Occupational Courses 46

CLBT 1010	Introduction To Clinical Laboratory Technology	2
CLBT 1030	Urinalysis/Body Fluids	2
CLBT 1040	Hematology/Coagulation	5
CLBT 1050	Serology/Immunology	3
CLBT 1060	Immunochemistry	4
CLBT 1070	Clinical Chemistry	4
CLBT 1080	Microbiology	5
CLBT 2090	Clinical Urinalysis, Serology, and Preanalytic Specimen Process Practicum	3
CLBT 2100	Clinical Immunochemistry Practicum	4
CLBT 2110	Clinical Hematology/Coagulation Practicum	4
CLBT 2120	Clinical Microbiology Practicum	4
CLBT 2130	Clinical Chemistry Practicum	4
CLBT 2200	Clinical Laboratory Technology Certification Review	2
<b>Total Hours</b>		<b>46</b>

## PHLEBOTOMY TECHNICIAN (PT21)

Technical Certificate of Credit

Teaches 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.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins
<b>Competitive Selection:</b>	No

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PT21](http://www.centralgatech.edu/gainfulemployment/PT21)

		Credit Hours
ALHS 1011	Structure and Function of the Human Body	5
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for AHS	2
COMP 1000	Introduction to Computer Literacy	3
ENGL 1010	Fundamentals of English I	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
<b>Total Hours</b>		<b>24</b>

## DENTAL ASSISTING

### DENTAL ASSISTING (DA12)

Diploma

Prepares students for employment in a variety of positions in today's dental offices. This program provides learning opportunities which 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 dental assisting.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall semester  
**Location(s) Offered:** Macon  
**Competitive Selection:** Yes

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/DA12](http://www.centralgatech.edu/gainfulemployment/DA12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>46</b>
ALHS 1040 Introduction to Healthcare	3
COMP 1000 Introduction to Computer Literacy	3
or MAST 1060 Medical Office Procedures	(4)
DENA 1010 Basic Human Biology	1
or ALHS 1011 Structure and Function of the Human Body	(5)
DENA 1030 Preventive Dentistry	2
DENA 1050 Microbiology and Infection Control	3
DENA 1070 Oral Pathology and Therapeutics	2
DENA 1080 Dental Biology	5
DENA 1090 Dental Assisting National Board Exam Preparation	1
DENA 1340 Dental Assisting I: General Chairside	6
DENA 1350 Dental Assisting II: Dental Specialties and EFDA Skills	7
DENA 1390 Dental Radiology	4
DENA 1400 Dental Practice Management	2
DENA 1460 Dental Practicum I	1
DENA 1470 Dental Practicum II	1
DENA 1480 Dental Practicum III	5
<b>Total Hours</b>	<b>55</b>

## DENTAL HYGIENE

### DENTAL HYGIENE (DH13)

Associate Degree

Prepares students for positions in the dental profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Registered dental hygienists work in a variety of professional settings. The public is most familiar with dental hygienists in the private dental office, where they perform numerous critical services designed to detect and prevent diseases of the mouth. These include oral prophylaxis; examining the head, neck, and oral areas for signs of disease; educating patients about oral hygiene; taking or developing radiographs; and applying fluoride or sealants. In this setting, registered dental hygienists play a vital role in protecting the oral health of the American public.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Summer  
**Location(s) Offered:** Macon | Warner Robins  
**Competitive Selection:** Yes

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>22</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
SPCH 1101 Public Speaking	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
SOCI 1101 Introduction to Sociology	3
<i>Area III - Natural Sciences/Mathematics</i>	
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
MATH 1111 College Algebra	3
or MATH 1101 Mathematical Modeling	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Core Courses</b>	<b>8</b>
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
<b>Occupational Courses</b>	<b>53</b>
BIOL 2117 Microbiology	3
BIOL 2117L Microbiology Lab	1
DHYG 1000 Tooth Anatomy and Root Morphology	2
DHYG 1010 Oral Embryology and History	1
DHYG 1020 Head and Neck Anatomy	2
DHYG 1030 Dental Materials	2
DHYG 1040 Preclinical Dental Hygiene Lecture	2
DHYG 1050 Preclinical Dental Hygiene Lab	2
DHYG 1070 Radiology Lecture	2
DHYG 1090 Radiology Lab	1
DHYG 1110 Clinical Dental Hygiene I Lecture	2
DHYG 1111 Clinical Dental Hygiene I Lab	3
DHYG 1206 Pharmacology and Pain Control	3
DHYG 2010 Clinical Dental Hygiene II Lecture	2
DHYG 2020 Clinical Dental Hygiene II Lab	2

DHYG 2050 Oral Pathology	3
DHYG 2070 Community Dental Health	3
DHYG 2080 Clinical Dental Hygiene III Lecture	2
DHYG 2090 Clinical Dental Hygiene III Lab	4
DHYG 2110 Biochemistry and Nutrition Fundamentals for the Dental Hygienist	2
DHYG 2130 Clinical Dental Hygiene IV Lecture	2
DHYG 2140 Clinical Dental Hygiene IV Lab	4
DHYG 2200 Periodontology	3
<b>Total Hours</b>	<b>83</b>

# HEMODIALYSIS TECHNOLOGY

HECT 1120 Hemodialysis Practicum 4  
**Total Hours 17**

## HEMODIALYSIS TECHNOLOGIST (HT12)

Diploma

Equips health care workers with the skills, knowledge, and attitude necessary to succeed in the field of hemodialysis. Technicians operate machines that eliminate waste and extract liquefied substances from the blood of sick people whose kidneys will no longer perform that function naturally. These professionals are also named as renal dialysis technicians and also nephrology specialists. They operate under the management of medical doctors, chiefly in hospitals and clinics. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Summer  
**Location(s) Offered:** Macon | Warner Robins  
**Competitive Selection:** Yes

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HT12](http://www.centralgatech.edu/gainfulemployment/HT12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>28</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1040 Introduction to Health Care	3
COMP 1000 Introduction to Computer Literacy	3
HECT 1100 Hemodialysis Patient Care	7
HECT 1120 Hemodialysis Practicum	4
HECT 1130 Hemodialysis Reuse/Reprocess Practicum	6
<b>Total Hours</b>	<b>37</b>

## HEMODIALYSIS PATIENT CARE SPECIALIST (HPC1)

Technical Certificate of Credit

Equips health care workers with the skills, knowledge, and attitude necessary to succeed in the field of hemodialysis. Students may be required to successfully pass criminal background checks and drugs screen analysis before placement in clinical settings.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Embedded program  
**Location(s) Offered:** Embedded program  
**Competitive Selection:** No

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HPC1](http://www.centralgatech.edu/gainfulemployment/HPC1)

	<b>Credit Hours</b>
ALHS 1040 Introduction to Health Care	3
COMP 1000 Introduction to Computer Literacy	3
HECT 1100 Hemodialysis Patient Care	7

## HEMODIALYSIS REUSE/REPROCESSING TECHNICIAN (HRO1)

Technical Certificate of Credit

**Embedded TCC - students must enroll in HT12 diploma**

Equips health care workers with the skills, knowledge, and attitude necessary to succeed in the field of hemodialysis as a reuse technician who performs reprocessing of hemodialyzers. Students may be required to successfully pass criminal background checks and drugs screen analysis before placement in clinical settings.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Minimum Age:** 18  
**Semester(s) Offered:** Embedded program  
**Location(s) Offered:** Embedded program  
**Competitive Selection:** No

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HRO1](http://www.centralgatech.edu/gainfulemployment/HRO1)

		<b>Credit Hours</b>
COMP 1000	Introduction to Computer Literacy	3
HECT 1100	Hemodialysis Patient Care	7
HECT 1130	Hemodialysis Reuse/Reprocessing Practicum	6
<b>Total Hours</b>		<b>16</b>

# MEDICAL ASSISTING

## MEDICAL ASSISTING (MA23)

Associate Degree

Prepares students for employment in a variety of positions in today's medical offices. This program provides learning opportunities which 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.

### Academic Progress

Students must pass all MAST courses with a "C" or above and maintain a GPA of 2.00 or higher in order to progress to the next semester of courses and remain on track. Students who receive a grade below "C" are considered off-track and will be subject to repeat the course upon space availability. Only one course failure is allowed once in the program.

Medical Assisting students who withdrew with the intent to return will only receive consideration based on space availability regardless of the term. If the student becomes off track, the student will need to reapply for the program by filling out the progression form. When the student is considered off track, their MAST classes are only acceptable if they are 2 years old or less. If they are older than 2 years, then the student must repeat the class(es).

Students who have withdrawn, requested to transfer, or students who have taken upper level courses attempting to improve their chance of being re-admitted to the program will not gain/obtain an advantage and will not be given assurance that space will be allotted. History shows that very few students are admitted/returned/or re-admitted under these circumstances.

An adverse finding on a student's background check may keep them from participating in externship and CGTC does not guarantee the student a site. The clinical site has the right to refuse a student based on an adverse background check or drug screen.

Graduates of the Medical Assisting program will be eligible to take the National Medical Assistant Certification Exam through National Center for Competency Testing. A student who has been convicted of a felony or misdemeanor may be admitted into the program but may prohibit one from taking the certification exam. For more information please visit NCCT's webpage at [www.ncctinc.com](http://www.ncctinc.com).

### Education Requirements

- Admission:** High school diploma or GED®
- Graduation:** High school diploma or GED®
- Placement Scores:** Standard
- Minimum Age:** 17
- Semester(s) Offered:** Fall | Spring | Summer
- Location(s) Offered:** Macon | Milledgeville | Warner Robins
- Competitive Selection:** Yes

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	

XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	General Education Core Elective (Areas I - IV)	3

### Occupational Courses 48

COMP 1000	Introduction to Computer Literacy	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
MAST 1010	Legal and Ethical Concerns in the Medical Office	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1080	Medical Assisting Skills I	4
MAST 1090	Medical Assisting Skills II	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3
MAST 1120	Human Diseases	3
MAST 1170	Medical Assisting Externship	6
MAST 1180	Medical Assisting Seminar	3

**Total Hours 63**

## MEDICAL ASSISTING (MA22)

Diploma

Prepares students for employment in a variety of positions in today's medical offices. This program provides learning opportunities which 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.

### Academic Progress

Students must pass all MAST courses with a "C" or above and maintain a GPA of 2.00 or higher in order to progress to the next semester of courses and remain on track. Students who receive a grade below "C" are considered off-track and will be subject to repeat the course upon space availability. Only one course failure is allowed once in the program.

Medical Assisting students who withdrew with the intent to return will only receive consideration based on space availability regardless of the term. A transfer student attempting to gain admission or readmission to the Medical Assisting Program will only receive consideration after taking the PSB Exam, submitting their official academic transcripts from their previously attended college(s) and completion of the progression form. The Registrar's Office will review such requests and make the admission decision accordingly.

If the student becomes off track, the student will need to reapply for the program by filling out the progression form. When the student is considered off track, their MAST classes are only acceptable if they are 2 years old or less. If they are older than 2 years, then the student must repeat the class(es). Students who have withdrawn, requested to transfer, or students who have taken upper level courses attempting to improve their chance of being re-admitted to the program will not gain/obtain an advantage and will not be given assurance that space will be allotted. History shows that very few students are admitted/returned/or re-admitted under these circumstances.

An adverse finding on a student's background check may keep them from participating in externship and CGTC does not guarantee the student a site. The clinical site has the right to refuse a student based on an adverse background check or drug screen.

Graduates of the Medical Assisting program will be eligible to take the National Medical Assistant Certification Exam

through National Center for Competency Testing. A student who has been convicted of a felony or misdemeanor may be admitted into the program but may prohibit one from taking the certification exam. For more information please visit NCCT's webpage at [www.ncctinc.com](http://www.ncctinc.com).

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins  
**Competitive Selection:** Yes

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/MA22](http://www.centralgatech.edu/gainfulemployment/MA22)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
PSYC 1010 Basic Psychology	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1090 Medical Terminology for Allied Health Sciences	2
MAST 1010 Legal and Ethical Concerns in the Medical Office	2
MAST 1030 Pharmacology in the Medical Office	4
MAST 1060 Medical Office Procedures	4
MAST 1080 Medical Assisting Skills I	4
MAST 1090 Medical Assisting Skills II	4
MAST 1100 Medical Insurance Management	2
MAST 1110 Administrative Practice Management	3
MAST 1120 Human Diseases	3
MAST 1170 Medical Assisting Externship	6
MAST 1180 Medical Assisting Seminar	3
<b>Total Hours</b>	<b>54</b>

### MEDICAL ASSISTING RECEPTIONIST (MAR1)

Technical Certificate of Credit

Provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills and attitudes required in the modern medical offices. Medical Assisting Receptionists answer the telephone and manage medical records, schedule appointments, greet patients, and interview patients to gain needed information.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment  
**Competitive Selection:** No

	<b>Credit Hours</b>
ALHS 1090 Medical Terminology for Allied Health Sciences	2
COMP 1000 Introduction to Computer Literacy	3
MAST 1010 Legal and Ethical Concerns in the	

	Medical Office	2
MAST 1060	Medical Office Procedures	4
		<b>Total Hours 11</b>

### MEDICAL CODING (MC41)

Technical Certificate of Credit

Provides a basic short-term academic credential with 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. This program provides basic training in anatomy and physiology, medical terminology, medical procedural coding skills, and physician's procedural coding skills.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville  
**Competitive Selection:** No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/MC41](http://www.centralgatech.edu/gainfulemployment/MC41)

	<b>Credit Hours</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1090 Medical Terminology for Allied Health Sciences	2
BUSN 1440 Document Production	4
ENGL 1010 Fundamentals of English I	3
MAST 1120 Human Diseases	3
MAST 1510 Medical Billing and Coding I	2
MAST 1520 Medical Billing and Coding II	3
MAST 1530 Medical Procedural Coding	2
<b>Total Hours</b>	<b>24</b>

### MEDICAL SKIN CARE SPECIALIST (MS61)

Technical Certificate of Credit

Offers medical training for students to assist in dermatology offices as well as plastic surgery offices. After completing the certificate, students will be trained to assist with minor surgery as well as advanced skin care treatments such as scar removal, microdermabrasion, and chemical peel.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville  
**Competitive Selection:** No

	<b>Credit Hours</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1040 Introduction to Health Care	3
MAST 1010 Legal and Ethical Concerns in the Medical Office	2
MSCS 1010 Essentials of Medical Esthetics	3
MSCS 1020 Advanced Medical Skin Care Treatment	2
<b>Total Hours</b>	<b>15</b>

## ASSOCIATE OF SCIENCE IN NURSING (AN43)

Associate Degree

Prepares students for positions in the nursing profession. The curriculum is designed to produce highly trained, technically advanced, competent and caring individuals who are prepared to practice professional nursing in a variety of healthcare settings. The purpose of the program is to provide the learner with the necessary knowledge, skills, and attitudes to practice competently and safely as a beginning nurse generalist in a variety of acute and long-term care settings.

*Program graduates who meet exit requirements will be eligible to apply to the Georgia Board of Nursing to write the national licensure examination (NCLEX) to become registered nurses (RNs). Note: Students seeking competitive admission into this program should first apply through the Associate of Applied Science Interdisciplinary Studies (AF53) program.*

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Spring  
**Location(s) Offered:** Warner Robins  
**Competitive Selection:** Yes

	Credit Hours
<b>General Education Core Courses</b>	<b>15</b>
<i>Area I – Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II – Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III – Natural Sciences/Mathematics</i>	
MATH 1111 College Algebra	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1103 Quantitative Skills and Reasoning	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
Program Specific Requirement	
PSYC 2103 Human Growth and Development	3
or SOCI 1101 Introduction to Sociology	(3)
or MATH 1127 Introduction to Statistics	(3)
<b>Occupational Core Courses</b>	<b>12</b>
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
BIOL 2117 Introductory Microbiology	3
BIOL 2117L Introductory Microbiology Lab	1
<b>RNSG Occupational Courses</b>	<b>38</b>
RNSG 1032 Foundations of Nursing Care	8
RNSG 1034 Pharmacology for Nursing	3
RNSG 1036 Health and Illness Nursing I	6
RNSG 2032 Health and Illness Nursing II	6
RNSG 2034 Family Nursing	6
RNSG 2036 Health and Illness Nursing III	6
RNSG 2038 Leadership	3

## PRACTICAL NURSING (PN12)

Diploma

Prepares 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 academic and 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. A variety of clinical experiences is planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates have the qualifications of an entry-level practical nurse. 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 health care facility to complete the clinical portions of their educational training.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins  
**Competitive Selection:** Yes

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PN12](http://www.centralgatech.edu/gainfulemployment/PN12)

	Credit Hours
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>48</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1060 Diet and Nutrition for AHS	2
PNSG 2010 Introduction to Pharmacology and Clinical Calculations	2
PNSG 2030 Nursing Fundamentals	6
PNSG 2035 Nursing Fundamentals Clinical	2
PNSG 2210 Medical Surgical Nursing I	4
PNSG 2220 Medical Surgical Nursing II	4
PNSG 2230 Medical Surgical Nursing III	4
PNSG 2240 Medical Surgical Nursing IV	4
PNSG 2250 Maternity Nursing	3
PNSG 2255 Maternity Nursing Clinical	1
PNSG 2310 Medical Surgical Nursing Clinical I	2
PNSG 2320 Medical Surgical Nursing Clinical II	2
PNSG 2330 Medical Surgical Nursing Clinical III	2
PNSG 2340 Medical Surgical Nursing Clinical IV	2
PNSG 2410 Nursing Leadership	1
PNSG 2415 Nursing Leadership Clinical	2
<b>Total Hours</b>	<b>57</b>

## NURSE AIDE (CN21)

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 this program 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.

Students enrolled in this program may be required to successfully pass both criminal background checks and drug screening procedures to participate in required clinical experiences with patients in licensed facilities. Clinical sites may require liability insurance and proof of immunization status to participate in required clinical experiences. Uniforms/scrubs may be required at required clinical experience facilities. All costs for these items are the responsibility of the student and not CGTC. Specific details will be provided during class orientation to NAST 1100.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Crawford   Macon   Milledgeville Putnam   Warner Robins
<b>Competitive Selection:</b>	No

	<b>Credit Hours</b>
ALHS 1040 Introduction to Health Care	3
ALHS 1060 Diet And Nutrition for AHS	2
ALHS 1090 Medical Terminology for AHS	2
NAST 1100 Nurse Aide Fundamentals	6
<b>Total Hours</b>	<b>13</b>

#### PATIENT CARE ASSISTING (PC21)

Technical Certificate of Credit

Provides students with the knowledge, skills, and attitudes necessary to succeed as assistants in patient care in nursing homes and other health care facilities. This program includes the nurse aide fundamentals class, as approved by the Georgia Medical Care Foundation, as well as courses currently being taught under state standards in the general areas of psychosocial needs of patients, work ethics, communications, infection control, patient hygiene, nourishment, taking vital signs, and patient care. The program requires 23-credit hours and 450 contact hours. Students should be able to successfully complete the program in one to two semesters. Program completers are qualified to take the state certification test for CNAs.

Students enrolled in this 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins
<b>Competitive Selection:</b>	No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PC21](http://www.centralgatech.edu/gainfulemployment/PC21)

	<b>Credit Hours</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1040 Introduction to Health Care	3
ALHS 1060 Diet And Nutrition for AHS	2
ALHS 1090 Medical Terminology for AHS	2

COMP 1000	Introduction to Computer Literacy	3
EMPL 1000	Interpersonal Relations and Professional Development	2
NAST 1100	Nurse Aide Fundamentals	6
<b>Total Hours</b>		<b>23</b>

## ORTHOPEDIC TECHNOLOGY

### ORTHOPEDIC TECHNOLOGY (OT13)

Associate Degree

#### *New description effective Spring 2018 (201814):*

Involves a combination of didactic, laboratory, and clinical environments that prepare students to work with orthopedic surgeons to treat patients in a variety of health care settings. The program provides the skills and knowledge needed to become a competent orthopedic technologist performing the following services: applying, adjusting, and removing casts and splints, fitting and educating patients in the use of orthopedic braces and equipment; setting up, adjusting, and maintaining orthopedic traction configurations; assisting with the care of acutely injured patients; and assisting the physician in the reduction and/or manipulation of orthopedic injuries; assisting the orthopedic surgeon in an operating room setting; and performing basic office and department procedures such as vital signs and patient medical history. Graduates may be employed in hospitals, physician offices, medical clinics, and orthopedic bracing and equipment companies.

#### *Description prior to Spring 2018 (201814):*

Prepares students to work with orthopedic surgeons to treat patients in a variety of health care environments. The program provides the skills and knowledge needed to become a competent orthopedic technologist performing the following services: routine office and departmental procedures and the ability to perform certain basic functions; adjusting and removing casts, splints, and braces; setting up, adjusting, and maintaining fraction configurations; assisting with the care of acutely injured patients; and assisting the physician in the reduction and/or manipulation of orthopedic injuries. Successful completion of this program leads to eligibility for the National Board of Certified Orthopedic Technologists certification exam. Graduates may be employed in hospitals, clinics, and private practice offices.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall
<b>Location(s) Offered:</b>	Macon
<b>Competitive Selection:</b>	Yes

	Credit Hours
<b>General Education Core Courses</b>	<b>18</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
ENGL 1102 Literature and Composition	3
SPCH 1101 Public Speaking	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
<b>Occupational Courses</b>	<b>51</b>
COMP 1000 Introduction to Computers	3
ALHS 1040 Introduction to Healthcare	3
ALHS 1090 Medical Terminology for Allied Health Sciences	2

BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ORTT 1010	Orthopedic Anatomy and Physiology	4
ORTT 1020	Orthopedic Techniques I	4
ORTT 1030	Introduction to Orthopedic Surgical Techniques	4
ORTT 1040	Advanced Orthopedic Anatomy and Physiology	4
ORTT 1050	Orthopedic Techniques II	4
ORTT 2010	Orthopedic Technology Clinical I	5
ORTT 2020	Orthopedic Technology Clinical II	7
ORTT 2030	Orthopedic Technology Capstone	3
<b>Total Hours</b>		<b>69</b>

# PARAMEDICINE

## PARAMEDICINE (PT13)

Associate Degree

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 on an ambulance. The paramedic is a link from the scene into the health care system. This program prepares students for employment in paramedic positions in today's health services field and provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. This 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 State Office of Emergency Medical Service and Trauma (SOEMST) as a paramedic.

**Conditions for Admission:** Hold current certification and/or licensure as an: EMT I/85 (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMTI to AEMT update course); EMT I/99; or AEMT. Completion of General Education Core and Anatomy and Physiology classes required prior to start of EMSP classes. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Spring  
**Location(s) Offered:** Macon  
**Competitive Selection:**No

	Credit Hours
<b>General Education Core Courses</b>	<b>18</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
Choose one of the following Math courses:	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>52</b>
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
EMSP 2110 Foundations of Paramedicine	3

EMSP 2120 Applications of Pathophysiology for Paramedics	3
EMSP 2130 Advanced Resuscitative Skills for Paramedics	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 for Special Patient Populations	4
EMSP 2510 Clinical Applications for The Paramedic I	2
EMSP 2520 Clinical Applications for The Paramedic II	2
EMSP 2530 Clinical Applications for The Paramedic III	2
EMSP 2540 Clinical Applications for The Paramedic IV	1
EMSP 2550 Clinical Applications for The Paramedic V	1
EMSP 2560 Clinical Applications for The Paramedic VI	1
EMSP 2570 Clinical Applications for The Paramedic VII	1
EMSP 2710 Field Internship for the Paramedic	2
EMSP 2720 Practical Applications for the Paramedic	3
<b>Total Hours</b>	<b>67</b>

## EMS PROFESSIONS (EP12)

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 an AEMT 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. AEMTs function as part of a comprehensive EMS response, under medical oversight and perform interventions with the basic and advanced equipment typically found on an ambulance. The AEMT is a link from the scene to the emergency health care system.

**Conditions for Admission:** Completion ALHS 1011, ALHS 1090 and MATH 1012 required prior to start of EMSP classes. 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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Macon | Warner Robins  
**Competitive Selection:**No

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/EP12](http://www.centralgatech.edu/gainfulemployment/EP12)

	Credit Hours
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3

or MATH 1101	Mathematical Modeling	(3)
or MATH 1103	Quantitative Skills and Reasoning	(3)
or MATH 1111	College Algebra	(3)
PSYC 1010	Basic Psychology	3
or PSYC 1101	Introductory Psychology	(3)

**Occupational Courses 33**

ALHS 1011	Structure and Function of the Human Body	5
or BIOL 2113	Anatomy and Physiology I	(3)
and BIOL 2113L	Anatomy and Physiology Lab I	(1)
and BIOL 2114	Anatomy and Physiology II	(3)
and BIOL 2114L	Anatomy and Physiology Lab II	(1)
ALHS 1090	Medical Terminology for Allied Health Sciences	2
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	EMT Assessment/Airway Management and Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock and Trauma for the EMT	3
EMSP 1160	Clinical and 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 and Practical Applications for the AEMT	3
<b>Total Hours</b>		<b>42</b>

**PARAMEDICINE (PT12)**

Diploma

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, and perform interventions with the basic and advanced equipment typically found on an ambulance. The paramedic is a link from the scene into the health care system. This program prepares students for employment in paramedic positions in today's health services field and 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 State Office of Emergency Medical Service and Trauma (SOEMST) as a paramedic.

**Conditions for Admission:** Hold current certification and/or licensure as an: EMT I/85 (with successful completion of Georgia State Office of Emergency Medical Services and Trauma (SOEMST) EMTI to AEMT update course); EMT I/99; or AEMT. Completion of General Education Core and Anatomy and Physiology classes required prior to start of EMSP classes. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

**Education Requirements**

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18

**Semester(s) Offered:** Summer Semester

**Location(s) Offered:** Macon

**Competitive Selection:**No

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/PT12](http://www.centralgatech.edu/gainfulemployment/PT12)

**Credit Hours**

**General Education Core Courses**

ENGL 1010	Fundamentals of English I	3
or ENGL 1101	Composition and Rhetoric	(3)
MATH 1012	Foundations of Mathematics	3
or MATH 1103	Quantitative Skills and Reasoning	(3)
or MATH 1101	Mathematical Modeling	(3)
or MATH 1111	College Algebra	(3)
PSYC 1010	Basic Psychology	3
or PSYC 1101	Introductory Psychology	(3)

**Occupational Courses 49**

ALHS 1011	Structure and Function of the Human Body	5
or BIOL 2113	Anatomy and Physiology I	(3)
and BIOL 2113L	Anatomy and Physiology Lab I	(1)
and BIOL 2114	Anatomy and Physiology II	(3)
and BIOL 2114L	Anatomy and Physiology Lab II	(1)
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills for Paramedics	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 for Special Patient Populations	4
EMSP 2510	Clinical Applications for The Paramedic I	2
EMSP 2520	Clinical Applications for The Paramedic II	2
EMSP 2530	Clinical Applications for The Paramedic III	2
EMSP 2540	Clinical Applications for The Paramedic IV	1
EMSP 2550	Clinical Applications for The Paramedic V	1
EMSP 2560	Clinical Applications for The Paramedic VI	1
EMSP 2570	Clinical Applications for The Paramedic VII	1
EMSP 2710	Field Internship for the Paramedic	2
EMSP 2720	Practical Applications for the Paramedic	3
<b>Total Hours</b>		<b>58</b>

**ADVANCED EMERGENCY MEDICAL TECHNICIAN (EMH1)**

Technical Certificate of Credit

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 (AEMT) function as part of a comprehensive EMS response, under medical oversight and perform interventions with the basic and advanced equipment typically found on an ambulance. The AEMT 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 (NREMT) AEMT certification examination and apply for Georgia licensure as an AEMT.

Criminal background checks and drug screens may be required based on the requirements for participation in

clinical experiences.

**Conditional Program Admission:** Student must 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 provide proof of successful completion of EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, and EMSP 1160, and be eligible to sit for the NREMT EMT Exam to enroll in this program.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall (Warner Robins) Spring (Macon)
<b>Location(s) Offered:</b>	Macon   Warner Robins
<b>Competitive Selection:</b>	No

		Credit Hours
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 and Practical Applications for the AEMT	3
<b>Total Hours</b>		<b>10</b>

### EMERGENCY MEDICAL RESPONDER (EB71)

Technical Certificate of Credit

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. This program provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of pre-hospital, 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.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment
<b>Competitive Selection:</b>	No

		Credit Hours
ALHS 1011	Structure and Function of the Human Body	5
ALHS 1090	Medical Terminology for AHS	2
EMSP 1010	Emergency Medical Responder	4
<b>Total Hours</b>		<b>11</b>

### EMERGENCY MEDICAL TECHNICIAN (EMT) (EMJ1)

Technical Certificate of Credit

Prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual will possess the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians (EMT) function as part of a comprehensive EMS response, under medical oversight. EMTs perform interventions with the basic equipment typically found on an ambulance. The EMT 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Macon   Warner Robins
<b>Competitive Selection:</b>	No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/EMJ1](http://www.centralgatech.edu/gainfulemployment/EMJ1)

		Credit Hours
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	EMT Assessment/Airway Management and Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock and Trauma for the EMT	3
EMSP 1160	Clinical and Practical Applications for the EMT	1
<b>Total Hours</b>		<b>16</b>

**PREHOSPITAL EMS OPERATIONS (PEO1)**

Technical Certificate of Credit

Combines emergency medical technician and advanced emergency medical technician programs and 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 (AEMT) perform interventions with the basic and advanced equipment typically found on an ambulance. The AEMT 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.

Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

**Education Requirements**

**Admission:** High school diploma or GED®

**Graduation:** High school diploma or GED®

**Placement Scores:** Standard

**Minimum Age:** 18

**Semester(s) Offered:** Fall (Macon) | Spring (Warner Robins)

**Location(s) Offered:** Macon | Warner Robins

**Competitive Selection:**No

**Gainful Employment:**

[www.centralgatech.edu/gainfulemployment/PEO1](http://www.centralgatech.edu/gainfulemployment/PEO1)

	<b>Credit Hours</b>
EMSP 1110 Introduction to the EMT Profession	3
EMSP 1120 EMT Assessment/Airway Management and Pharmacology	3
EMSP 1130 Medical Emergencies for the EMT	3
EMSP 1140 Special Patient Populations	3
EMSP 1150 Shock and Trauma for the EMT	3
EMSP 1160 Clinical and 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 and Practical Applications for the AEMT	3
<b>Total Hours</b>	<b>26</b>

## PHARMACY TECHNOLOGY

### PHARMACY TECHNOLOGY (PT22)

Diploma

Enables the student to acquire the knowledge, skills and attitudes for employment within a pharmacy. Program graduates will be able to perform a variety of technical duties related to preparing and dispensing drugs in accordance with standard procedures and laws under the supervision of a registered pharmacist. A variety of clinical experiences is designed to integrate theory and practice. Graduates will be employable as an entry level pharmacy technician.

NOTE: A student who has been convicted of a felony or misdemeanor may be admitted to the Pharmacy Technology program, but such a conviction may prohibit one from taking the National Certification Examination. Permission to sit for the examination rests solely with the National Certification Board for Pharmacy Technicians. All health sciences core courses must be completed prior to Fall semester progression.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17  
**Semester(s) Offered:** Fall semester  
**Location(s) Offered:** Macon  
**Competitive Selection:** Yes

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PT22](http://www.centralgatech.edu/gainfulemployment/PT22)

	Credit Hours
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics or MATH 1013 Algebraic Concepts	3 (3)
PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>47</b>
ALHS 1040 Introduction to Health Care	3
ALHS 1090 Medical Terminology for Allied Health Sciences	2
ALHS 1011 Structure and Function of the Human Body	5
COMP 1000 Introduction to Computer Literacy	3
PHAR 1000 Pharmaceutical Calculations	4
PHAR 1010 Pharmacy Technology Fundamentals	5
PHAR 1020 Principles of Dispensing Medications	4
PHAR 1030 Principles of Sterile Medication Preparation	4
PHAR 1040 Pharmacology	4
PHAR 1050 Pharmacy Technology Practicum or PHAR 1055 Pharmacy Assistant Practicum	5 (5)
PHAR 2060 Advanced Pharmacy Technology Principles	3
PHAR 2070 Advanced Pharmacy Technology Practicum	5
<b>Total Hours</b>	<b>56</b>

### PHARMACIST'S ASSISTANT (PA71)

Technical Certificate of Credit

Provides students with short-term training to prepare them for entry-level employment in a variety of settings such as hospitals, retail pharmacies, nursing homes, medical clinics, etc. Students will receive didactic instruction and fundamental concepts and principles of receiving, storing, and dispensing medications.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Dual-Enrollment  
**Competitive Selection:** No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PA71](http://www.centralgatech.edu/gainfulemployment/PA71)

	Credit Hours
PHAR 1000 Pharmaceutical Calculations	4
PHAR 1010 Pharmacy Technology Fundamentals	5
PHAR 1020 Principles of Dispensing Medications	4
PHAR 1055 Pharmacy Assistant Practicum	5
or PHAR 1050 Pharmacy Technology Practicum	(5)
<b>Total Hours</b>	<b>18</b>

## POLYSOMNOGRAPHIC TECHNOLOGY

### POLYSOMNOGRAPHIC TECHNOLOGY (PT42)

Diploma

Prepares individuals to work under the supervision of a physician to provide comprehensive evaluation and treatment of sleep disorders. The program includes instruction in sleep related human anatomy and physiology, neuroanatomy and physiology of sleep, respiratory physiology, polysomnographic technology, polysomnographic record scoring with emphasis on sleep staging, respiratory, electromyographic and electrocardiographic events, positive airway pressure and oxygen treatment, sleep disorders, sleep related medical terminology, 10-20 measurement, and technologist related psychomotor skills. Graduates of this program will enter the field as a polysomnographic technologist.

This program conducts a rigorous curriculum of lectures, labs, and clinical assignments. Clinical rotations are conducted on-site at a variety of hospitals and free-standing sleep disorders centers. Clinical rotations are 10-hour overnight assignments, with little to no flexibility in schedule. Therefore, holding a full-time job while in the program is not encouraged. A total of 210 clinical hours must be documented for completion of the program. However, the requirements of the program can be completed as a part-time job worker. Students are encouraged in advance to discuss with their family, the demanding schedule and overnight hours required to complete this program. Completion of this program is intended to lead to employment as a sleep technologist.

Before beginning the polysomnographic occupational courses, students are required to successfully complete ENGL 1010, MATH 1012, PSYC 1010, ALHS 1090, and ALHS 1011 with a grade of "C" or above. Students can complete the remaining two required courses, ALHS 1040 and COMP 1000 prior to beginning the occupational classes or while taking PSGT 1111, PSGT 2100 and PSGT 2101. Completion of all courses with a grade "C" or above is required to progress. Students who receive a grade below "C" are considered off-track and will be subject to repeat the course based upon space availability during the next offering.

**Criminal Background Checks** – Following Fall Semester acceptance into the Polysomnography Program, students will be required to complete a criminal background check during Spring Semester to verify eligibility for clinical site acceptance during Summer Semester.

Prospective applicants with a conviction history are encouraged to speak with the program coordinator prior to application submission. Criminal backgrounds may prohibit a student or graduate from gaining employment as a Polysomnographic Technologist.

**Drug Screening** – Following Fall Semester acceptance into the Polysomnography Program, students will be required to complete a drug screen during Spring Semester to verify eligibility for clinical site acceptance during Summer Semester. Positive drug screen results will prohibit a student from being placed with a clinical site.

**Health Physical** – Once accepted into the program, students will be required to complete a health physical and be cleared by a licensed Physician to perform the duties of a practicing Sleep Technologist.

**Immunization Record** – a photocopy of the student's immunization record(s) will be required for clinical sites.

**CPR Certification** – a photocopy of a current (and for the duration of all clinicals) CPR Certification will be required for clinical sites.

#### Education Requirements

**Admission:** High school diploma or GED®

**Graduation:** High school diploma or GED®

**Placement Scores:** Standard

**Minimum Age:** 18

**Semester(s) Offered:** Fall semester

**Location(s) Offered:** Macon

**Competitive Selection:**No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/PT42](http://www.centralgatech.edu/gainfulemployment/PT42)

		Credit Hours
<b>General Education Core Courses</b>		<b>9</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
<b>Occupational Courses</b>		<b>45</b>
ALHS 1011	Structure and Function of the Human Body	5
ALHS 1040	Introduction to Healthcare	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computer Literacy	3
PSGT 1101	Introduction to Sleep Technology	7
PSGT 1102	Essentials of Sleep Technology	7
PSGT 1111	Polysomnographic Applications	9
PSGT 2100	Polysomnographic Practicum	6
PSGT 2101	Sleep Technology – Special Topics	3
<b>Total Hours</b>		<b>54</b>



# RADIOLOGIC TECHNOLOGY

## ADVANCED MEDICAL IMAGING (AM13)

Associate Degree

Provides educational opportunities to the post-graduate registered radiologic technologist, registered radiation therapist, and registered nuclear medicine technologist, and provides the students with the knowledge needed to perform MRI and CT exams and to sit for the Post-Primary Magnetic Resonance Imaging Certification Examination and/or the Post-Primary Computed Tomography Certification Examination. The academic component is designed to meet content specifications of the American Registry of Radiologic Technologists (ARRT) exam in Magnetic Resonance Imaging and Computed Tomography, as well as providing for continuing educational requirements. This program consists of classroom-based, web-enhanced didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams needed to sit for the MRI and CT certification exams.

Applicants must be a registered Radiologic Technologist, registered Radiation Therapist or registered Nuclear Medicine Technologist in good standing.

Students are selected on a first come, first serve basis. New students are accepted for Fall Semester.

Clinical slots are limited. Clinical education credit will be considered for prior clinical experience. After applying to CGTC, applicants must contact the CT program faculty to determine clinical credit and/or clinical slot placement.

In order to begin the clinical requirements, students must complete a physical form, tuberculosis skin test, supply proof of immunization, undergo a background check, and submit to a drug screen test.

Students completing the CT clinical education courses must provide their radiation dose history.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Fall semester  
**Location(s) Offered:** Macon  
**Competitive Selection:** No

Credit Hours

### General Education Core Courses

16

*Area I - Language Arts/Communication*  
 ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*  
 PSYC 1101 Introduction to Psychology 3

*Area III - Natural Sciences/Mathematics*  
 MATH 1111 College Algebra 3  
 CHEM 1211 Chemistry I 3  
 CHEM 1211L Chemistry Lab I 1

*Area IV - Humanities/Fine Arts*  
 HUMN 1101 Introduction to Humanities 3

### Occupational Courses

48

COMP 1000 Introduction to Computer Literacy 3  
 MRIM 2300 Orientation and Introduction to MRI 3  
 MRIM 2320 MRI Procedures and Cross-Sectional

	Anatomy	3
MRIM 2330	MRI Physics and Instrumentation	3
MRIM 2350	Magnetic Resonance Imaging Clinical Education I	6
MRIM 2360	Magnetic Resonance Imaging Clinical Education II	6
MRIM 2370	MRI Review	3
RADT 2201	Introduction to Computed Tomography	2
RADT 2210	Computed Tomography Physics and Instrumentation	5
RADT 2220	Computed Tomography Procedures I	3
RADT 2230	Computed Tomography Procedures II	3
RADT 2250	Computed Tomography Clinical I	4
RADT 2265	Computed Tomography Clinical II	4
	<b>Total Hours</b>	<b>64</b>

## RADIOLOGIC TECHNOLOGY (RT23)

Associate Degree

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.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 18  
**Semester(s) Offered:** Spring (Warner Robins); Fall Semester (Macon)  
**Location(s) Offered:** Macon | Warner Robins  
**Competitive Selection:** Yes

Credit Hours

### General Education Core Courses

15

*Area I - Language Arts/Communication*  
 ENGL 1101 Composition and Rhetoric 3

*Area II - Social/Behavioral Sciences*  
 PSYC 1101 Introduction to Psychology 3  
 or SOCI 1101 Introduction to Sociology (3)

*Area III - Natural Sciences/Mathematics*  
 MATH 1101 Mathematical Modeling 3  
 or MATH 1111 College Algebra (3)

*Area IV - Humanities/Fine Arts*  
 XXXX xxxx Humanities/Fine Arts Elective 3  
*(General Education Electives can be found on page 56)*

Additional General Education Elective (from Areas I-IV)  
 XXXX xxxx General Education Core Elective 3

### Occupational Core Courses

8

BIOL 2113 Anatomy and Physiology I 3  
 BIOL 2113L Anatomy and Physiology Lab I 1  
 BIOL 2114 Anatomy and Physiology II 3  
 BIOL 2114L Anatomy and Physiology Lab II 1

### Occupational Courses

54

ALHS 1090 Medical Terminology for Allied Health

	Sciences	2					<b>Credit Hours</b>
RADT 1010	Introduction to Radiology	4					
RADT 1030	Radiographic Procedures I	3	RADT 2201	Introduction to Computed Tomography	2		
RADT 1060	Radiographic Procedures II	3	RADT 2210	Computed Tomography Physics and Instrumentation	5		
RADT 1065	Radiologic Science	2	RADT 2220	Computed Tomography Procedures I	3		
RADT 1075	Radiographic Imaging	4	RADT 2230	Computed Tomography Procedures II	3		
RADT 1085	Radiologic Equipment	3	RADT 2250	Computed Tomography Clinical I	4		
RADT 1200	Principles of Radiation Biology and Protection	2	RADT 2265	Computed Tomography Clinical II	4		
RADT 1320	Clinical Radiography I	4				<b>Total Hours</b>	<b>21</b>
RADT 1330	Clinical Radiography II	7					
RADT 2090	Radiographic Procedures III	2					
RADT 2260	Radiologic Technology Review	3					
RADT 2340	Clinical Radiography III	6					
RADT 2360	Clinical Radiography IV	9					
	<b>Total Hours</b>	<b>77</b>					

**COMPUTED TOMOGRAPHY SPECIALIST (CT91)**  
 Technical Certificate of Credit

Provides educational opportunities to the post-graduate registered radiologic technologist, registered radiation therapist, and registered nuclear medicine technologist in good standing. This program provides students with the knowledge needed to perform CT exams, and to sit for the Post-Primary Computed Tomography Certification Examination. The academic component is designed to meet competency requirements of the American Registry of Radiologic Technologists (ARRT) exam in Computed Tomography, as well as providing for continuing educational requirements. This Computed Tomography certificate program consists of classroom-based, web-enhanced didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams needed to sit for the CT certification exam.

Applicants must be a registered Radiologic Technologist, registered Radiation Therapist or registered Nuclear Medicine Technologist in good standing.

Students are selected on a first come, first serve basis.

Clinical slots are limited. Clinical education credit will be considered for prior clinical experience. After applying to CGTC, applicants must contact the CT program faculty to determine clinical credit and/or clinical slot placement.

In order to begin the clinical requirements, students must complete a physical form, tuberculosis skin test, supply proof of immunization, undergo a background check, and submit to a drug screen test.

Students completing the CT clinical education courses must provide their radiation dose history.

**Conditional Program Admission:** Must be a Registered Radiologic Technologist (American Registry of Radiologic Technologists) to enroll in this program.

**Education Requirements**

- Admission:** High school diploma or GED®
- Graduation:** High school diploma or GED®
- Placement Scores:** Standard
- Minimum Age:** 18
- Semester(s) Offered:** Fall
- Location(s) Offered:** Macon Campus
- Competitive Selection:**No

**Gainful Employment:**  
[www.centralgatech.edu/gainfulemployment/CT91](http://www.centralgatech.edu/gainfulemployment/CT91)

**MAGNETIC RESONANCE IMAGING SPECIALIST (MRI1)**  
 Technical Certificate of Credit

Provides educational opportunities to the post-graduate registered radiologic technologist, registered radiation therapist, registered sonographer, and registered nuclear medicine technologist in good standing. This program provides students with the knowledge needed to perform MRI exams, and to sit for the Post-Primary Magnetic Resonance Imaging certification Examination. The academic component is designed to meet competency requirements of the American Registry of Radiologic Technologists (ARRT) exam in Magnetic Resonance Imaging, as well as providing for continuing educational requirements. This Magnetic Resonance Imaging Certificate program consists of classroom-based, web-enhanced didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams needed to sit for the MRI certification exam.

Applicants must be a registered Radiologic Technologist, registered Radiation Therapist, registered Nuclear Medicine Technologist or registered Sonographer in good standing. Students are selected on a first come, first serve basis. Clinical slots are limited. Clinical education credit will be considered for prior clinical experience. After applying to CGTC, applicants must contact the MRI program faculty to determine clinical credit and/or clinical slot placement.

In order to begin the clinical requirements, students must complete a physical form, tuberculosis skin test, supply proof of immunization, undergo a background check, and submit to a drug screen test.

**Conditional Program Admission:** Must be a Registered Radiologic Technologist (American Registry of Radiologic Technologists) to enroll in this program.

**Education Requirements**

- Admission:** High school diploma or GED®
- Graduation:** High school diploma or GED®
- Placement Scores:** Standard
- Semester(s) Offered:** Fall | Spring (*effective Summer 2018*)
- Location(s) Offered:** Macon
- Competitive Selection:**No

**Gainful Employment:**  
[www.centralgatech.edu/gainfulemployment/MRI1](http://www.centralgatech.edu/gainfulemployment/MRI1)

			<b>Credit Hours</b>
MRIM 2300	Orientation and Introduction to MRI	3	
MRIM 2320	MRI Procedures and Cross-Sectional Anatomy	3	
MRIM 2330	MRI Physics and Instrumentation	3	
MRIM 2350	Magnetic Resonance Imaging Clinical Education I	6	
MRIM 2360	Magnetic Resonance Imaging Clinical Education II	6	
MRIM 2370	MRI Review	3	
	<b>Total Hours</b>	<b>24</b>	

# SURGICAL TECHNOLOGY

## SURGICAL TECHNOLOGY (ST12)

Diploma

Prepares students for employment in a variety of positions in today's surgical technology profession. Students are trained with nurses and surgeons to help provide the best possible care of the surgical patient. Students acquire knowledge and experience with aseptic technique, and they learn to prepare and to use surgical instruments and supplies that are utilized during surgical procedures. This program is designed for the students to obtain entry-level positions in surgical technology and to achieve certification after successful completion of the program. This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) ([www.centralgatech.edu/about-cgtc/accreditation.html](http://www.centralgatech.edu/about-cgtc/accreditation.html)).

### Program Requirements

The first semester of Surgical Technology consists of theory classes, laboratory application and clinicals. Second and third semester instruction includes theory classes with lab application on campus and clinicals. All clinical experiences are conducted at various area hospitals and surgery centers.

Prior to clinical rotations, students must submit to the instructor a current physical exam, immunization forms, proof of student professional liability insurance, and school medical insurance. Students will need to submit a satisfactory criminal background check as well as a drug screen in order to be placed in a clinical health care facility to complete the clinical portions of their educational training.

Navy scrub clothes are the official Surgical Technology uniform and must be purchased prior to clinicals. Students will not be allowed to begin their clinical affiliation until the above-mentioned forms, uniforms, and evidence of current CPR certification are received.

Surgical technology students must pass all courses each semester with a grade of "C" or above to progress to the next semester and remain on track. Those who receive a grade below a "C" will be removed from the progression of the program. Those who meet readmission requirements will be placed on a waiting list and may be accepted back into the program the next time that the program is offered, based on exit status, space availability, and GPA.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17 (18 to participate in clinicals)  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Warner Robins  
**Competitive Selection:** Yes

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ST12](http://www.centralgatech.edu/gainfulemployment/ST12)

	<b>Credit Hours</b>
<b>General Education Core Courses</b>	<b>9</b>
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
PSYC 1010 Basic Psychology	3
<b>Occupational Courses</b>	<b>48</b>
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1090 Medical Terminology for Allied Health Sciences	2
SURG 1010 Introduction to Surgical Technology	8
SURG 1020 Principles of Surgical Technology	7

SURG 1080 Surgical Microbiology	2
SURG 1100 Surgical Pharmacology	2
SURG 2030 Surgical Procedures I	4
SURG 2040 Surgical Procedures II	4
SURG 2110 Surgical Technology Clinical I	3
SURG 2120 Surgical Technology Clinical II	3
SURG 2130 Surgical Technology Clinical III	3
SURG 2140 Surgical Technology Clinical IV	3
SURG 2240 Seminar in Surgical Technology	2
<b>Total Hours</b>	<b>57</b>

## ADVANCED CENTRAL STERILE PROCESSING TECHNICIAN (CS91)

Technical Certificate of Credit

Provides entry level training that will prepare graduates to function in the sterile supply processing and distribution areas of healthcare facilities. The program is based on theory and clinical instruction that will apply scientific principles to the specific work area. Theory classes with laboratory participatory classes will prepare students for clinical application of skills and knowledge in healthcare facilities. Together with practical experiences provide students with the preparation necessary to be eligible to sit for the International Association of Healthcare Central Service Materiel Management (IAHCSMM) certification exam. Course CSSP 1010 is offered summer term with clinicals offered the following semester.

### Program Requirements

Submit a H.S. Transcript and Birth Certificate

Documentation of a Physical Exam and Immunization Record (to include Hepatitis B series)

Criminal Background Check and Documentation of a Negative

Drug/Alcohol Screen

Medical Liability Insurance (one-time charge paid at the time of registration)

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 17 (18 to participate in clinicals)  
**Semester(s) Offered:** Summer  
**Location(s) Offered:** Warner Robins  
**Competitive Selection:** No

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CS91](http://www.centralgatech.edu/gainfulemployment/CS91)

		<b>Credit Hours</b>
EMPL 1000 Interpersonal Relations and Professional Development		2
or PSYC 1010 Basic Psychology		(3)
ALHS 1090 Medical Terminology for Allied Health Sciences		2
CSSP 1010 Central Sterile Supply Processing Technician		5
CSSP 1020 Central Sterile Supply Processing Technician Practicum I		6
CSSP 1022 Central Sterile Supply Processing Technician Practicum II		5
<b>Total Hours</b>		<b>20</b>

## VETERINARY TECHNOLOGY

### ANIMAL HEALTHCARE ASSISTANT (AH31)

Technical Certificate of Credit

The Animal Healthcare Assistant certificate program train students in the care of equine, canine, small animals and large animals. Students will have an opportunity to earn training in the care of four different types of animals.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Adjusted
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	At discretion of the partnership
<b>Location(s) Offered:</b>	GDC

	Credit Hours
VETT 1060 Animal Anatomy and Physiology	4
BCST 1010 Survey of Technology	3
BCST 1000 Interpersonal Development	2
VETT 1100 Introduction to Large Animal Care	4
or VETT 1107 Introduction to Equine Care	(4)
or VETT 1108 Introduction to Canine Care	(4)
or VETT 1109 Introduction to Small Animal Care	(4)
<b>Total Hours</b>	<b>13</b>

## HEALTH SCIENCES TECHNICAL CERTIFICATES

### HEALTH CARE ASSISTANT (HA21)

Technical Certificate of Credit

Provides academic foundations 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.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	17
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Crawford   Macon   Milledgeville Putnam   Warner Robins

**Competitive Selection:**No

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/HA21](http://www.centralgatech.edu/gainfulemployment/HA21)

	Credit Hours
<b>General Education Core Courses*</b>	
ALHS 1011 Structure and Function of the Human Body	5
ALHS 1040 Introduction to Health Care	3
ALHS 1090 Medical Terminology for AHS	2
COMP 1000 Introduction to Computer Literacy	3
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
or MATH 1013 Algebraic Concepts	(3)
PSYC 1010 Basic Psychology	3

#### CHOOSE ONE SPECIALIZATION BELOW

##### *Electrocardiography Technology (8ET1)*

ECGT 1030 Introduction to Electrocardiography	5
ECGT 1050 Electrocardiography Practicum	5

<i>Medical Coding - Option 1 (8MC1)</i>		<b>10</b>
MAST 1120 Human Pathological Conditions in the Medical Office		3
MAST 1510 Medical Billing and Coding I		2
MAST 1520 Medical Billing and Coding II		3
MAST 1530 Medical Procedural Coding		2

##### *Medical Coding Assistant Insurance Data - Option 2 (8MC1)*

		<b>14</b>
BUSN 1015 Introduction to Medical Insurance		4
BUSN 1440 Document Production		4
BUSN 2370 Medical Office Billing/Coding/Insurance		3
MAST 1120 Human Diseases		3

##### *Medical Front Office (8MF1)*

		<b>13</b>
BUSN 1440 Document Production		4
BUSN 2340 Medical Administrative Procedures		4
BUSN 2370 Medical Office Billing/Coding/Insurance		3
MAST 1100 Medical Insurance Management		2

##### *Nurse Aide (8NA1)*

		<b>8</b>
ALHS 1060 Diet and Nutrition for Allied Health Sciences		2
NAST 1100 Nurse Aide Fundamentals		6

##### *Phlebotomy (8PS1)*

		<b>8</b>
PHLT 1030 Introduction to Venipuncture		3
PHLT 1050 Clinical Practice		5

**Total Hours 30**

# Public Safety & Professional Services

Barbering

Cosmetology

Culinary

Criminal Justice Technology

Early Childhood Care and Education

Paralegal Studies

## BARBERING

### BARBERING (BA12)

Diploma

Prepares students for careers in the field of barbering. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, hair treatments and manipulations, haircutting techniques, shaving, skin care, reception, sales, and management. The curriculum meets state licensing requirements of the Georgia State Board of Barbering. The program graduate is employable as a barber, salon/shop manager, or a salon/shop owner.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BA12](http://www.centralgatech.edu/gainfulemployment/BA12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
EMPL 1000 Interpersonal Relations and Professional Development	2
ENGL 1010 Fundamentals of English I	3
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>48</b>
BARB 1000 Introduction to Barber/Styling Implements	3
BARB 1010 Science: Sterilization, Sanitation, and Bacteriology	3
BARB 1022 Haircutting and Shampooing I	3
BARB 1024 Haircutting and Shampooing II	3
BARB 1030 Haircutting/Basic Styling	3
BARB 1040 Shaving	2
BARB 1050 Science: Anatomy and Physiology	3
BARB 1060 Introduction to Color Theory/Color Application	3
BARB 1072 Introduction to Chemical Restructuring of Hair	3
BARB 1074 Advanced Chemical Restructuring of Hair	3
BARB 1082 Advanced Haircutting and Styling I	3
BARB 1084 Advanced Haircutting and Styling II	3
BARB 1090 Structures of Skin, Scalp, Hair and Facial Treatments	3
BARB 1100 Barber/Styling Practicum and Internship	3
BARB 1110 Shop Management/Ownership	3
COMP 1000 Introduction to Computer Literacy	3
<b>Total Hours</b>	<b>56</b>

### BARBER II (BI31)

Technical Certificate of Credit

The Barbering program prepares students for careers in the field of barbering. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, hair treatments and manipulations, haircutting techniques, shaving, skin care, reception, sales, and management. The curriculum meets state licensing requirements of the Georgia State Board of Barbering. The program graduate receives a Barbering II certificate and is employable as a barber, salon/shop manager, or a salon/shop owner.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

	Credit Hours
BARB 1000 Introduction to Barber/Styling Implements	3
BARB 1010 Science: Sterilization, Sanitation, and Bacteriology	3
BARB 1022 Haircutting and Shampooing I	3
BARB 1024 Haircutting and Shampooing II	3
BARB 1030 Haircutting/Basic Styling	3
BARB 1040 Shaving	3
BARB 1050 Science: Anatomy and Physiology	3
BARB 1082 Advanced Haircutting and Styling I	3
BARB 1084 Advanced Haircutting and Styling II	3
BARB 1090 Structures of Skin, Scalp, Hair and Facial Treatments	3
BARB 1100 Barber/Styling Practicum and Internship	3
BARB 1110 Shop Management/Ownership	3
<b>Total Hours</b>	<b>36</b>

### BARBERING ASSISTANT (BA71)

Technical Certificate of Credit

Provides training to prepare students to work as a barbering apprentice at a barber shop.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Adjusted
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BA71](http://www.centralgatech.edu/gainfulemployment/BA71)

	Credit Hours
BARB 1000 Introduction to Barber/Styling Implements	3
BARB 1010 Science: Sterilization, Sanitation, and Bacteriology	3
BARB 1022 Haircutting and Shampooing I	3
BARB 1024 Haircutting and Shampooing II	3
BARB 1030 Haircutting/Basic Styling	3
<b>Total Hours</b>	<b>15</b>

## BARBERING FOR COSMETOLOGISTS (BF21)

Technical Certificate of Credit

Allows the student who holds a current master cosmetology license to receive additional training that will qualify the student to take the examination for barbering.

**Conditional Program Admission:** Must hold a current cosmetology license issued by the Georgia State Board of Cosmetology to enroll in this program.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BF21](http://www.centralgatech.edu/gainfulemployment/BF21)

	Credit Hours
BARB 1000 Introduction to Barber/Styling Implements	3
BARB 1010 Science: Sterilization, Sanitation, and Bacteriology	3
BARB 1022 Haircutting and Shampooing I	3
BARB 1024 Haircutting and Shampooing II	3
BARB 1030 Haircutting/Basic Styling	3
BARB 1040 Shaving	3
BARB 1090 Structures of Skin, Scalp, Hair and Facial Treatments	3
<b>Total Hours</b>	<b>21</b>

## BARBERING INSTRUCTOR TRAINING (BI11)

Technical Certificate of Credit

Provides a course of study for learning the skills needed to teach the theory and practice of skills in barbering as required by the Technical College System of Georgia. Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments. Graduates of the program may be employed as barbering instructors in public or private education and business in Georgia and many other states.

**Conditional Program Admission:** Must hold a valid Master Barbering License from the State of Georgia to enroll in this program.

### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Placement Scores:** Standard  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/BI11](http://www.centralgatech.edu/gainfulemployment/BI11)

	Credit Hours
BARB 2010 Introduction and Application to Barber Instruction	4
BARB 2020 Program Development	5
BARB 2030 Classroom/Lab Management	5
BARB 2040 Teaching Skills and Techniques	5
BARB 2050 Barbering Practicum I	3
BARB 2060 Barbering Practicum II	3
<b>Total Hours</b>	<b>25</b>

## BARBERING FUNDAMENTALS (BF41)

Technical Certificate of Credit

*Effective Spring 2018 (201814)*

The Barbering Fundamentals technical certificate program provides introductory courses for students to begin a career pathway in the profession.

### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

		Credit Hours
BARB 1000 Introduction to Barber/Styling Implements		3
BARB 1010 Science: Sterilization, Sanitation, and Bacteriology		3
BARB 1022 Haircutting and Shampooing I		3
<b>Total Hours</b>		<b>9</b>

## COSMETOLOGY

### COSMETOLOGY (CO12)

Diploma

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. Students must clock in additional practicum hours to meet state licensing requirements of the State Board of Cosmetology. Program graduates are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CO12](http://www.centralgatech.edu/gainfulemployment/CO12)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
EMPL 1000 Interpersonal Relations and Professional Development	2
MATH 1012 Foundations of Mathematics	3
<b>Occupational Courses</b>	<b>47</b>
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 and 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 and Nail Care Practicum	2
<b>Total Hours</b>	<b>55</b>

### COSMETOLOGY INSTRUCTOR TRAINING (CI21)\*

Technical Certificate of Credit

\*Not currently accepting applications

Provides a course of study for learning the skills needed to teach the theory and practice of skills in cosmetology as required by the Technical College System of Georgia. Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments. Graduates of the program may be employed as a cosmetology instructor in public or private education institutions and business in Georgia and many other states.

**Conditional Program Admission:** Must hold a valid Master Cosmetologist License from the State of Georgia to enroll in this program.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon

		Credit Hours
COSM 2000	Instructional Theory and Documentation	4
COSM 2010	Salon Management	3
COSM 2020	Principles of Teaching	3
COSM 2030	Lesson Plans	3
COSM 2040	Classroom Management	3
COSM 2050	Instruction and Evaluation	2
COSM 2060	Practicum I	3
COSM 2070	Practicum II	3
<b>Total Hours</b>		<b>24</b>

### HAIR DESIGNER (HD21)

Technical Certificate of Credit

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 state licensing requirements of the State Board of Cosmetology.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	17
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Embedded program; not offered at any campus

		Credit Hours
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
<b>Total Hours</b>		<b>36</b>

### SHAMPOO TECHNICIAN (ST11)

Technical Certificate of Credit

Prepares students for careers in the field of cosmetology as shampoo technicians. Learning opportunities develop 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, 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 are employable as a cosmetology salesperson, salon manager, or salon owner.

#### Education Requirements

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Adjusted
<b>Minimum Age</b>	
<b>Dual Enrollment:</b>	9th - 12th grade in high school
<b>YDC:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment   Macon YDC

	<b>Credit Hours</b>
COSM 1000 Introduction to Cosmetology Theory	4
COSM 1020 Hair Care and Treatment	3
COSM 1120 Salon Management	3
COSM 1070 Nail Care and Advanced Techniques	3
or EMPL 1000 Interpersonal Relations and Professional Development	(2)
<b>Minimum Total Hours</b>	<b>12</b>

## CULINARY

### CULINARY NUTRITION ASSISTANT (CNB1)

Technical Certificate of Credit

To deliver quality meals that contributes to the nutritional well-being of students.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
CUUL 1110 Culinary Safety and Sanitation	2
Cooking Option - 6 credit hours	
CUUL 1120 Principles of Cooking	6
CUUL 1122 Foundations of Cooking Principles	3
CUUL 1124 Foundations of Cooking Techniques	3
CUUL 1170 Introduction to Culinary Nutrition	3
CUUL 1370 Culinary Nutrition and Menu Development	3
EMPL 1000 Interpersonal Relations and Professional Development	2
<b>Total Hours</b>	<b>17</b>

### FOOD PRODUCTION WORKER I (FPW1)

Technical Certificate of Credit

Provides basic entry-level skills for employment in the food service industry as prep cooks and banquet/service prep workers.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
CUUL 1000 Fundamentals of Culinary Arts	4
CUUL 1110 Culinary Safety and Sanitation	2
Cooking Option - 6 credit hours	
CUUL 1120 Principles of Cooking	6
CUUL 1122 Foundations of Cooking Principles	3
CUUL 1124 Foundations of Cooking Techniques	3
CUUL 1129 Fundamentals of Restaurant Operations	4
<b>Total Hours</b>	<b>16</b>

### PREP COOK (PC51)

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.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Adjusted  
**Minimum Age:**  
**Dual Enrollment:** 9th - 12th grade in high school  
**GDC:** None  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment | GDC

	Credit Hours
CUUL 1000 Fundamentals of Culinary Arts	4
CUUL 1110 Culinary Safety and Sanitation	2
Cooking Option - 6 credit hours	
CUUL 1120 Principles of Cooking	6
CUUL 1122 Foundations of Cooking Principles	3
CUUL 1124 Foundations of Cooking Techniques	3
<b>Total Hours</b>	<b>12</b>

# CRIMINAL JUSTICE TECHNOLOGY

FOSC 2037	Victimology	3
FOSC 2150	Case Preparation and Courtroom Testimony	4
<b>Total Hours</b>		<b>60</b>

## CRIMINAL JUSTICE TECHNOLOGY (CJT3)

Associate Degree

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. 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 this program does not ensure certification of officer status in Georgia; students must seek certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

### General Education Core Courses

<b>Area I - Language Arts/Communication</b>		<b>15</b>
ENGL 1101	Composition and Rhetoric	3

### Area II - Social/Behavioral Sciences

XXXX xxxx	Social/Behavioral Sciences Elective	3
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### Area III - Natural Sciences/Mathematics

MATH 1103	Quantitative Skills and Reasoning	3
or MATH 1101	Mathematical Modeling	(3)
or MATH 1111	College Algebra	(3)

### Area IV - Humanities/Fine Arts

XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	General Education Core Elective (Areas I - IV)	3

### Occupational Courses

<b>COMP 1000 Introduction to Computer Literacy</b>		<b>3</b>
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 1400	Ethics and Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 2070	Juvenile Justice	3
CRJU 2090	Criminal Justice Practicum	3

Choose 15 hours from the following

Occupationally-Guided Electives:

CRJU 1043	Probation and Parole	3
CRJU 1052	Criminal Justice Administration	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1075	Report Writing	3
CRJU 2060	Criminology	3
CRJU 2201	Criminal Courts	3

## CRIMINAL JUSTICE TECHNOLOGY (CJT2)

Diploma

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. 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 this program does not ensure certification of officer status in Georgia; students must seek certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/CJT2](http://www.centralgatech.edu/gainfulemployment/CJT2)

### General Education Core Courses

ENGL 1010	Fundamentals of English I	3
or ENGL 1101	Composition and Rhetoric	(3)
PSYC 1010	Basic Psychology	3
MATH 1012	Foundations of Mathematics	3
or MATH 1103	Quantitative Skills and Reasoning	(3)
or MATH 1101	Mathematical Modeling	(3)
or MATH 1111	College Algebra	(3)

### Occupational Courses

<b>COMP 1000 Introduction to Computer Literacy</b>		<b>3</b>
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 1400	Ethics and Cultural Perspectives for Criminal Justice	3
CRJU 2020	Constitutional Law for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 2070	Juvenile Justice	3
CRJU 2090	Criminal Justice Practicum/Internship	3

Choose 9 hours from the following

Occupationally-Guided Electives:

CRJU 1043	Probation and Parole	3
CRJU 1052	Criminal Justice Administration	3
CRJU 1062	Methods of Criminal Investigation	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1075	Report Writing	3
CRJU 2060	Criminology	3
CRJU 2201	Criminal Courts	3
FOSC 2037	Victimology	3
FOSC 2150	Case Preparation and Courtroom Testimony	4

**Total Hours 48**

**CRIME SCENE FUNDAMENTALS (CZ31)**

Technical Certificate of Credit

Introduces students to various careers in the rapidly growing field of forensic science. Students will gain 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.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
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
<b>Total Hours</b>	<b>12</b>

**CRIMINAL JUSTICE FUNDAMENTALS (CJ71)**

Technical Certificate of Credit

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. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
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
<b>Total Hours</b>	<b>12</b>

**CRIMINAL JUSTICE SPECIALIST (CJ21)**

Technical Certificate of Credit

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. Upon completion, this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of this program does not ensure

certification or officer status in Georgia; students must seek certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
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 for Criminal Justice	3
<b>Total Hours</b>	<b>15</b>

**INTRODUCTION TO CRIMINAL JUSTICE (IT51)**

Technical Certificate of Credit

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, students may pursue entry level opportunities in the criminal justice field. Completion of this program 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.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
CRJU 1010 Introduction to Criminal Justice	3
CRJU 1030 Corrections	3
CRJU 1040 Principles of Law Enforcement	3
CRJU 2050 Criminal Procedure	3
<b>Total Hours</b>	<b>12</b>

**LEGAL ISSUES FOR CRIMINAL JUSTICE (LIF1)**

Technical Certificate of Credit

Introduces the student to the legal issues relevant to criminal justice. Learning opportunities develop knowledge that is used as a basis for job related training, as an entry point for a diploma or degree programs, or pursuit of entry level job acquisition. This program contains sufficient hours in in-service law enforcement to meet the college requirements of the Intermediate Certificate of the Career Development Program of the Georgia Peace Officers Standards and Training Council.

**Education Requirements**

**Admission:** None  
**Graduation:** None  
**Placement Scores:** Standard  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring

**Location(s) Offered:** Dual Enrollment

		<b>Credit Hours</b>
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law for Criminal Justice	3
CRJU 2201	Criminal Courts	3
FOSC 2150	Case Preparation and Courtroom Testimony	4
<b>Total Hours</b>		<b>13</b>

### **SELECTED TOPICS FOR CRIMINAL JUSTICE (ST11)**

Technical Certificate of Credit

Introduces the student to specific matters that are of distinctive relevance to criminal justice. Learning opportunities develop knowledge that is used as a basis for job related training as an entry point for a diploma or degree program, or pursuit of entry level job acquisition. This program contains sufficient hours for in-service law enforcement to meet the college requirements of the Intermediate Certificate of the Career Development Program of the Georgia Peace Officers Standards and Training Council.

#### **Education Requirements**

<b>Admission:</b>	None
<b>Graduation:</b>	None
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	9th - 12th grade in high school
<b>Semester(s) Offered:</b>	Fall   Spring
<b>Location(s) Offered:</b>	Dual Enrollment

		<b>Credit Hours</b>
CRJU 1052	Criminal Justice Administration	3
CRJU 1065	Community-Oriented Policing	3
CRJU 1400	Ethics and Cultural Perspective for Criminal Justice	3
CRJU 2070	Juvenile Justice	3
<b>Total Hours</b>		<b>12</b>

## EARLY CHILDHOOD CARE AND EDUCATION

### EARLY CHILDHOOD CARE AND EDUCATION (EC13)

Associate Degree

Prepares 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. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

	Credit Hours
<b>General Education Core Courses</b>	<b>21</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
XXXX xxxx Language Arts/Communication Elective (General Education Electives can be found on page 56)	3
<i>Area II - Social/Behavioral Sciences</i>	
PSYC 1101 Introduction to Psychology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
ECCE 1101 Introduction to Early Childhood Care and Education	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 Children	3
ECCE 1120 Early Childhood Care and Education Practicum I	3
ECCE 1121 Early Childhood Care and Education Practicum	3
ECCE 2115 Language and Literacy	3
ECCE 2116 Math and Science	3
ECCE 2201 Exceptionalities	3
ECCE 2202 Social Issues and Family Involvement	3
ECCE 2203 Guidance and Classroom Management	3
ECCE 2245 Early Childhood Care and Education Internship I	6

#### SELECT ONE SPECIALIZATION

<i>Paraprofessional Specialization (8PS3)</i>	
ECCE 2310 Paraprofessional Methods and Materials	3

ECCE 2312 Paraprofessional Roles and Practices	3
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#### *Program Administration (8P13)*

ECCE 2320 Program Administration and Facility Management	3
ECCE 2322 Personnel Management	3

#### *Infant/Toddler Development (8ID3)*

ECCE 2330 Infant/Toddler Development	3
ECCE 2332 Infant/Toddler Group Care and Curriculum	3

#### *Exceptionalities (8EX3)*

ECCE 2360 Classroom Strategies for Exceptional Children	3
ECCE 2362 Exploring Your Role in the Exceptional Environment	3

**Total Hours 72**

### EARLY CHILDHOOD CARE AND EDUCATION (ECC2)

Diploma

Prepares 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. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/ECC2](http://www.centralgatech.edu/gainfulemployment/ECC2)

	Credit Hours
<b>General Education Core Courses</b>	<b>8</b>
ENGL 1010 Fundamentals of English I	3
or ENGL 1101 Composition and Rhetoric	(3)
MATH 1012 Foundations of Mathematics	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
EMPL 1000 Interpersonal Relations and Professional Development	2
or PSYC 1010 Basic Psychology	(3)
<b>Occupational Courses</b>	<b>45</b>
COMP 1000 Introduction to Computer Literacy	3
ECCE 1101 Introduction to Early Childhood Care and Education	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 Children	3
ECCE 1120 Early Childhood Care and Education Practicum I	3
ECCE 1121 Early Childhood Care and Education Practicum	3
ECCE 2115 Language and Literacy	3

ECCE 2116	Math and Science	3	Children	3
ECCE 2201	Exceptionalities	3	ECCE 2362	Exploring Your Role in the Exceptional Environment
ECCE 2202	Social Issues and Family Involvement	3		3
ECCE 2203	Guidance and Classroom Management	3		<b>Total Hours 9</b>
ECCE 2245	Early Childhood Care and Education Internship I	6		
	<b>Total Hours</b>	<b>53</b>		

### EARLY CHILDHOOD CARE AND EDUCATION BASICS (EC31)

Technical Certificate of Credit

Includes three basic courses that are needed for entry level workers and provides an introductory course to the ECCE field, a child growth and development course, and health, safety, and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia requires the basic knowledge included in this program for a person to be a lead teacher in a child care center and family day care center. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Pulaski Putnam   Warner Robins

		<b>Credit Hours</b>
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety, and Nutrition	3
	<b>Total Hours</b>	<b>9</b>

### EARLY CHILDHOOD EXCEPTIONALITIES (EC41)

Technical Certificate of Credit

Prepares students to work with children with special needs and emphasizes an inclusive classroom including strategies and activities for exceptional children (both low and high achieving students). Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

		<b>Credit Hours</b>
ECCE 2201	Exceptionalities	3
ECCE 2360	Classroom Strategies for Exceptional	

Children	3
ECCE 2362	Exploring Your Role in the Exceptional Environment
	3
	<b>Total Hours 9</b>

### EARLY CHILDHOOD PROGRAM ADMINISTRATION (ECP1)

Technical Certificate of Credit

Prepares students for a job as manager of a childcare learning center or a group day care center. The program emphasizes child growth and development and management and administration issues involved in managing a child care center. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	18
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Milledgeville   Warner Robins

		<b>Credit Hours</b>
ECCE 1103	Child Growth and Development	3
ECCE 2320	Program Administration and Facility Management	3
ECCE 2322	Personnel Management	3
	<b>Total Hours</b>	<b>9</b>

### INFANT/TODDLER CHILD CARE SPECIALIST (IC31)

Technical Certificate of Credit

Prepares students with the basics needed for working with infants and toddlers. The program provides an intense look at understanding and learning activities and proper care needed for infants and toddlers. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs. Students will have to submit a satisfactory criminal background check and possible drug screen and/or tuberculosis skin test in order to be placed in an observation, lab, practicum or internship site to complete portions of their educational training.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Location(s) Offered:</b>	Macon   Milledgeville   Putnam Warner Robins

		<b>Credit Hours</b>
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety, and Nutrition	3
ECCE 2330	Infant/Toddler Development	3
ECCE 2332	Infant/Toddler Group Care and Curriculum	3
	<b>Total Hours</b>	<b>15</b>

## PARALEGAL STUDIES

### PARALEGAL STUDIES (PS13)

Associate Degree

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. Note: Paralegals may not provide legal services directly to the public except as permitted by law.

Persons who have been convicted of a felony offense are not employable in the legal field. Evidence of a current satisfactory criminal record background check is required at the student's expense prior to participation in the internship.

#### Education Requirements

<b>Admission:</b>	High school diploma or GED®
<b>Graduation:</b>	High school diploma or GED®
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Macon   Warner Robins

	Credit Hours
<b>General Education Core Courses</b>	<b>18</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
ENGL 1102 Literature and Composition	3
SPCH 1101 Public Speaking	3
<i>Area II - Social/Behavioral Sciences</i>	
ECON 1101 Principles of Economics	3
or HIST 1111 World History I	(3)
or HIST 2111 U.S. History I	(3)
or POLS 1101 American Government	(3)
or PSYC 1101 Introduction to Psychology	(3)
or SOCI 1101 Introduction to Sociology	(3)
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
or MATH 1113 Pre-Calculus	(3)
or MATH 1127 Introduction to Statistics	(3)
<i>Area IV - Humanities/Fine Arts</i>	
ARTS 1101 Art Appreciation	3
or ENGL 2130 American Literature	(3)
or HUMN 1101 Introduction to Humanities	(3)
or MUSC 1101 Music Appreciation	(3)
<b>Occupational Courses</b>	<b>51</b>
COMP 1000 Introduction to Computer Literacy	3
PARA 1100 Introduction to Law And Ethics	3
PARA 1105 Legal Research and Legal Writing I	3
PARA 1110 Legal Research and Legal Writing II	3
PARA 1115 Family Law	3
PARA 1120 Real Estate Law	3
PARA 1125 Criminal Law and Criminal Procedure	3
PARA 1130 Civil Litigation	3
PARA 1135 Wills, Trusts, Probate, and Administration	3

PARA 1140 Tort Law	3
PARA 1145 Law Office Management	3
PARA 1150 Contracts, Commercial Law and Business Organizations	3
PARA 2210 Paralegal Internship I	6

Choose nine (9) hours from the following Specific Occupational-Guided Electives:

ENGL 1105 Workplace and Technical Communications	3
PARA 1200 Bankruptcy/Debtor-Creditor Relations	3
PARA 1205 Constitutional Law	3
PARA 1215 Administrative Law	3
PARA 2205 Advanced Legal Research and Writing	3
PARA 2215 Paralegal Internship II	6
<b>Total Hours</b>	<b>69</b>

### ADVANCED LEGAL ASSISTANT (AL41)

Technical Certificate of Credit

Targeted to students with bachelor's degrees who wish to prepare for paralegal positions in the law office, learning opportunities develop technical and professional knowledge and skills required for job acquisition, retention, and advancement. This certification, in addition to a bachelor's degree, will make students eligible to sit for the Certified Paralegal exam by the National Association of Legal Assistants.

#### Education Requirements

<b>Admission:</b>	Bachelor's Degree
<b>Graduation:</b>	Bachelor's Degree
<b>Placement Scores:</b>	Standard
<b>Minimum Age:</b>	16
<b>Semester(s) Offered:</b>	Fall   Spring   Summer
<b>Location(s) Offered:</b>	Warner Robins

#### Gainful Employment:

[www.centralgatech.edu/gainfulemployment/AL41](http://www.centralgatech.edu/gainfulemployment/AL41)

	Credit Hours
COMP 1000 Introduction to Computer Literacy	3
PARA 1100 Introduction to Law And Ethics	3
PARA 1105 Legal Research and Legal Writing I	3
PARA 1115 Family Law	3
PARA 1120 Real Estate Law	3
PARA 1125 Criminal Law and Criminal Procedure	3
PARA 1130 Civil Litigation	3
PARA 1140 Tort Law	3
PARA 1150 Contracts, Commercial Law and Business Organizations	3
<b>Total Hours</b>	<b>27</b>



# General Studies

Interdisciplinary Studies

Early College Essentials

Technical Specialist

Technical Studies

## INTERDISCIPLINARY STUDIES

### INTERDISCIPLINARY STUDIES (AF53)

Associate Degree

Allows customization of the program of study based on a student's individual academic and professional goals. Interdisciplinary studies is an option for students who wish to combine coursework from various disciplines into a single degree program if his or her specific goals and interests cannot be met through a school's existing majors, minors and electives. Students should work closely with a faculty advisor to strategically select coursework from designated areas of concentration that best suits their career path. Learning opportunities develop academic and professional knowledge and skills required for job acquisition or continued education.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	Credit Hours
<b>General Education Core Courses</b>	<b>21</b>
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
ENGL 1102 Literature and Composition	3
or ENGL 1105 Workplace and Technical Communications	(3)
or SPCH 1101 Public Speaking	(3)
<i>Area II - Social/Behavioral Sciences</i>	
Choose 6 hours from:	
ECON 1101 Principles of Economics	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 Introduction to Psychology	3
SOCI 1101 Introduction to Sociology	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1101 Mathematical Modeling	3
or MATH 1103 Quantitative Skills and Reasoning	(3)
or MATH 1111 College Algebra	(3)
Choose 3 or more hours from:	
BIOL 1111 Biology I	3
BIOL 1111L Biology Lab I	1
BIOL 1112 Biology II	3
BIOL 1112L Biology Lab II	1
BIOL 2113 Anatomy and Physiology I	3
BIOL 2113L Anatomy and Physiology Lab I	1
BIOL 2114 Anatomy and Physiology II	3
BIOL 2114L Anatomy and Physiology Lab II	1
BIOL 2117 Introductory Microbiology I	3
BIOL 2117L Introductory Microbiology Lab	1
CHEM 1211 Chemistry I	3
CHEM 1211L Chemistry Lab I	1
CHEM 1212 Chemistry II	3
CHEM 1212L Chemistry Lab II	1
MATH 1101 Mathematical Modeling	3
MATH 1103 Quantitative Skills and Reasoning	3
MATH 1111 College Algebra	3
MATH 1113 Pre-Calculus	3
MATH 1127 Introduction to Statistics	3

PHYS 1110 Conceptual Physics	3
PHYS 1110L Conceptual Physics Lab	1

#### Area IV - Humanities/Fine Arts

ARTS 1101 Art Appreciation	3
or ENGL 2130 American Literature	(3)
or HUMN 1101 Introduction to Humanities	(3)
or MUSC 1101 Music Appreciation	(3)

Interdisciplinary Studies Requirements 40  
 Choose course work from the following interdisciplinary areas of concentration: Aerospace, Trade & Industry; Business & Computer Technologies; Health Sciences; or Public Safety & Professional Services. *Students should work with a faculty advisor to strategically select courses to design a program that suits a specific career path.*

**Total Hours 61**

## EARLY COLLEGE ESSENTIALS

### EARLY COLLEGE ESSENTIALS (EC21)

Technical Certificate of Credit

Designed for a cooperative agreement between technical colleges and four-year colleges/universities in the area. These students have been identified as capable of performing academically at the college level; some are disengaged at the high school and are at risk of dropping out.

#### Education Requirements

**Admission:** None  
**Graduation:** None  
**Minimum Age:** 9th - 12th grade in high school  
**Semester(s) Offered:** Fall | Spring  
**Location(s) Offered:** Dual Enrollment

	Credit Hours
ENGL 1101 Composition and Rhetoric	3
PSYC 1101 Introductory Psychology	3
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)

#### Select ONE science course and corresponding lab (4 hours)

BIOL 1111 Biology I	3
and BIOL 1111L Biology Lab I	1
CHEM 1211 Chemistry I	3
and CHEM 1211L Chemistry Lab I	1
PHYS 1111 Introductory Physics	3
and PHYS 1111L Introductory Physics Lab	1

#### Area IV - Humanities/Fine Arts

XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3

**Total Hours 19**

## TECHNICAL SPECIALIST

### TECHNICAL SPECIALIST (TC31)

Technical Certificate of Credit

Prepares students for positions in business that require technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Warner Robins

	<b>Credit Hours</b>
COMP 1000 Introduction to Computer Literacy	3
ENGL 1101 Composition and Rhetoric	3
XXXX xxxx Occupationally-Guided Electives**	9-12
Humanities/Fine Arts - select 6 Hours from:	
ARTS 1101 Art Appreciation	3
MUSC 1101 Music Appreciation	3
HUMN 1101 Introduction to Humanities	3
ENGL 2130 American Literature	3
Social/Behavioral Science - Select 6 Hours from:	
PSYC 1101 Introductory Psychology	3
ECON 1101 Principles of Economics	3
SOCI 1101 Introduction to Sociology	3
POLS 1101 American Government	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
Natural Sciences/Mathematics - Select 3 Hours from:	
MATH 1101 Mathematical Modeling	3
MATH 1112 College Trigonometry	3
MATH 1113 Precalculus	3
MATH 1111 College Algebra	3
BIOL 1111 Biology I	3
and BIOL 1111L Biology Lab I	1
PHYS 1110 Conceptual Physics	3
and PHYS 1110L Conceptual Physics Lab	1
Electives – Select 6 to 12 hours:	
XXXX xxxx General Education Core Elective (Areas I - IV)	6-12
<b>Total Hours 36</b>	

\*\*Students may take any course except learning support

## TECHNICAL STUDIES

### TECHNICAL STUDIES (TS23)

Associate Degree

Prepares students for employment in a variety of positions in today's technical industry fields. This program offers students learning opportunities that develop higher level academic skills required for job acquisition, retention, and advancement. It is specifically open to students who have already completed another approved technical or industrial program of study. The program emphasizes a continuation of technical studies theory and practical applications necessary for successful employment. Program graduates will be qualified for employment as technicians.

**Conditional Program Admission:** Completion of a diploma program or dean approval is required to enroll in this program.

#### Education Requirements

**Admission:** High school diploma or GED®  
**Graduation:** High school diploma or GED®  
**Minimum Age:** 16  
**Semester(s) Offered:** Fall | Spring | Summer  
**Location(s) Offered:** Macon | Milledgeville | Putnam  
 Warner Robins

#### General Education Core Courses

	<b>Credit Hours</b>
<b>15</b>	
<i>Area I - Language Arts/Communication</i>	
ENGL 1101 Composition and Rhetoric	3
<i>Area II - Social/Behavioral Sciences</i>	
XXXX xxxx Social/Behavioral Sciences Elective	3
<i>Area III - Natural Sciences/Mathematics</i>	
MATH 1103 Quantitative Skills and Reasoning	3
or MATH 1101 Mathematical Modeling	(3)
or MATH 1111 College Algebra	(3)
<i>Area IV - Humanities/Fine Arts</i>	
XXXX xxxx Humanities/Fine Arts Elective	3
XXXX xxxx General Education Core Elective (Areas I - IV)	3
Block Transfer* of Occupational Preparation Courses	45
<b>Total Hours 60</b>	

\* Students can transfer occupational course credit from an earned diploma. Students may need additional occupationally-related coursework to meet the 45 credit hour requirement.



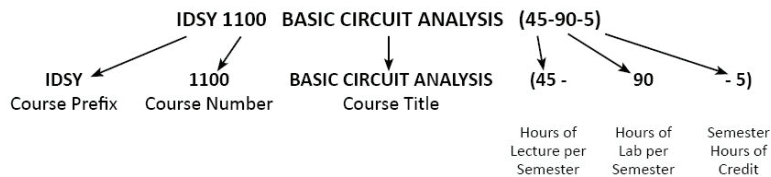
# Course Descriptions

## Legend of Course Descriptions

Since Central Georgia Technical College is continuously expanding and updating its programs and services, material in the CGTC catalog is subject to change without prior notice.

Following are descriptions of courses Offered: by CGTC. Courses are grouped alphabetically.

Each course title is preceded by a four-letter prefix and the course number. The three numbers on the right indicate lecture hours per week, lab hours per week and total credit hours, as shown below.



Some courses have prerequisites or co-requisites listed. A prerequisite must be taken prior to entering a course. A co-requisite must be taken prior to, or concurrently with, the course. In individual cases, prerequisites or co-requisites may be waived upon recommendation of the instructor or approval of the department chairperson.

For a list of suggested courses in specific programs of study, refer to the appropriate program in the Aerospace, Trade & Industry Programs; Business & Computer Technologies Programs; Health Sciences Programs; Public Safety & Professional Services Programs; and General Studies sections of this catalog. One semester equals a minimum of seventy-five (75) instructional days. One contact hour equals a minimum of seven hundred fifty (750) minutes of instruction.

One (1) semester hour of credit is defined as follows:

1. Lecture - One contact hour of class per week for the duration of a semester equals one semester hour of credit; Lecture is defined as instruction which emphasizes group or individualized classroom learning. Lecture instruction normally requires extensive out-of-class preparations by the student and follow-up out-of-class practice assignments.
2. Lab 2 - Two contact hours of Lab 2 per week for the duration of a semester equals one semester hour of credit; Lab 2 is defined as instruction which emphasizes teacher-assisted learning activities. Lab 2 instruction normally requires some out-of-class preparation by the student and may require some out-of-class practice assignments.
3. Lab 3 - Three contact hours of Lab 3 laboratory per week for the duration of a semester equals one semester hour of credit; Lab 3 is defined as instruction which emphasizes structured activities requiring the application and practice of occupational competencies. Lab 3 instruction normally requires only limited out-of-class preparation by the student and no out-of-class practice assignments.
4. Practicum/Internship Instruction - Three contact hours of Practicum/Internship instruction per week for the duration of a semester equals one semester hour of credit; Practicum/Internship instruction is defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. Practicum/Internship instruction normally requires only limited out-of-class preparation by the student and no out-of-class practice assignments.

# Course Descriptions

## Accounting

### ACCT 1100 | FINANCIAL ACCOUNTING I (45-30-4)

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.

**Prerequisite:** Program admission or Advisor Approval

### ACCT 1105 | FINANCIAL ACCOUNTING II (45-30-4)

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.

**Prerequisite:** ACCT 1100 and Instructor Approval for Provisional Students

### ACCT 1115 | COMPUTERIZED ACCOUNTING (15-60-3)

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

**Prerequisite:** ACCT 1100, COMP 1000

### ACCT 1120 | SPREADSHEET APPLICATIONS (30-60-4)

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.

**Prerequisites:** COMP 1000

### ACCT 1125 | INDIVIDUAL TAX ACCOUNTING (30-30-3)

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.

**Prerequisites:** None

### ACCT 1130 | PAYROLL ACCOUNTING (30-30-3)

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.

**Prerequisite:** ACCT 1100

### ACCT 2000 | MANAGERIAL ACCOUNTING (30-30-3)

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.

**Prerequisite:** ACCT 1105

### ACCT 2120 | BUSINESS TAX ACCOUNTING (30-30-3)

This course provides instruction for preparation of both state and federal partnership, corporation and other business tax returns. Topics include: organization form, overview of taxation of partnership, special partnership issues, corporate tax elections, adjustments to income and expenses, tax elections, forms and schedules, tax credits, reconciliation of book and tax income, tax depreciation methods, and tax calculations.

**Prerequisite:** ACCT 1125

### ACCT 2135 | INTRODUCTION TO GOVERNMENTAL AND NONPROFIT ACCOUNTING (45-0-3)

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

**Prerequisite:** ACCT 1105

### ACCT 2140 | LEGAL ENVIRONMENT OF BUSINESS (45-0-3)

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

**Prerequisite:** Program Admission

### ACCT 2145 | PERSONAL FINANCE (45-0-3)

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.

**Prerequisite:** None

### ACCT 2150 | PRINCIPLES OF AUDITING (45-0-3)

Introduces the student to the auditors' responsibilities in the areas of professional standards, reports, ethics and legal liability. Students learn about the technology of auditing; evidence gathering, audit/assurance processes, internal controls, and sampling techniques. The specific methods of auditing the revenue/receipts process, disbursement cycle, personnel and payroll procedures, asset changes, and debt and equity are learned. Finally procedures related to attest engagements and internal auditing are reviewed.

**Prerequisite:** ACCT 1105

### ACCT 2155 | PRINCIPLES OF FRAUD EXAMINATION (45-0-3)

This course 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.

**Prerequisite:** Program Admission

## Automotive Collision Repair

**ACRP 1000 | INTRODUCTION TO AUTO COLLISION REPAIR (54-12-4)**

Prerequisite: None

This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces the structural configuration and 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.

**ACRP 1005 | AUTOMOBILE COMPONENT REPAIR AND REPLACEMENT (26-79-4)**

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.

Prerequisite: None

Corequisite: ACRP 1000

**ACRP 1010 | FOUNDATIONS OF COLLISION REPAIR (29-111-5)**

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.

Prerequisite: None

Corequisite: ACRP 1000, ACRP 1005

**ACRP 1015 | FUNDAMENTALS OF AUTOMOTIVE WELDING (34-56-4)**

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.

Prerequisite: Program admission

Corequisite: ACRP 1000

**ACRP 2001 | INTRODUCTION TO AUTO PAINTING AND REFINISHING (45-62-5)**

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.

Prerequisite: None

Corequisite: ACRP 1000, ACRP 1010

**ACRP 2002 | PAINTING AND REFINISHING TECHNIQUES (39-71-5)**

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.

Prerequisite: None

Corequisite: ACRP 1000, ACRP 2001

**ACRP 2009 | REFINISHING INTERNSHIP (0-90-2)**

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.

Prerequisite: ACRP 1000

**ACRP 2108 | REFINISHING INTERNSHIP I (0-45-1)**

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

Prerequisite: ACRP 1000

Corequisite:

**ACRP 2109 | REFINISHING INTERNSHIP II (0-45-1)**

Provides continued 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.

Prerequisite:

**Air Conditioning Technology****AIRC 1005 | REFRIGERATION FUNDAMENTALS (45-45-4)**

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.

Prerequisite: None

**AIRC 1010 | REFRIGERATION PRINCIPLES AND PRACTICES (45-45-4)**

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 refrigeration safety.

Corequisite: AIRC 1005

**AIRC 1020 | REFRIGERATION SYSTEMS COMPONENTS (45-45-4)**

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

Corequisite: AIRC 1010

**AIRC 1030 | HVACR ELECTRICAL FUNDAMENTALS (45-45-4)**

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.

Prerequisite: None

**AIRC 1040 HVACR ELECTRICAL MOTORS (45-45-4)**

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, installation procedures, types of electric motors, electric motor service, and safety.

**Prerequisite:** AIRC 1030

#### **AIRC 1050 | HVACR ELECTRICAL COMPONENTS AND CONTROLS (45-45-4)**

This course provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include identification, installation, application, diagnosis and safety procedures for : transformers, thermostats, pressure switches, control boards and commonly used HVACR controls and control systems.

**Corequisite:** AIRC 1030

#### **AIRC 1060 | AIR CONDITIONING SYSTEMS APPLICATION AND INSTALLATION (45-45-4)**

This course 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.

**Corequisite:** AIRC 1010, AIRC 1030

#### **AIRC 1070 | GAS HEAT (45-45-4)**

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.

**Prerequisite:** AIRC 1030

#### **AIRC 1080 | HEAT PUMPS AND RELATED SYSTEMS (45-45-4)**

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.

**Prerequisite:** AIRC 1010, AIRC 1030

#### **AIRC 1090 | TROUBLESHOOTING AIR CONDITIONING SYSTEMS (45-45-4)**

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.

**Prerequisite:** AIRC 1010, AIRC 1030

### **Allied Health Science**

#### **ALHS 1010 | INTRODUCTION TO ANATOMY AND PHYSIOLOGY (60-0-4)**

This course 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.

**Prerequisite:** Regular Admission

#### **ALHS 1011 | STRUCTURE AND FUNCTION OF THE HUMAN BODY (75-0-5)**

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.

**Prerequisite:** Regular Admission

#### **ALHS 1040 | INTRODUCTION TO HEALTH CARE (30-45-3)**

This course 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.

**Prerequisite:** None

#### **ALHS 1060 | DIET AND NUTRITION FOR ALLIED HEALTH SCIENCES (30-0-2)**

A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

**Prerequisite:** Program Admission

#### **ALHS 1090 | MEDICAL TERMINOLOGY FOR ALLIED HEALTH SCIENCES (30-0-2)**

This course 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.

**Prerequisite:** None

### **Advanced Machine Tool**

#### **AMCA 2110 | CNC FUNDAMENTALS (30-60-4)**

This course 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 computer-aided design (CAD) and computer-aided manufacturing (CAM).

**Prerequisite:** MCHT 1011, MCHT 1012

#### **AMCA 2130 | CNC MILL MANUAL PROGRAMMING (45-60-5)**

This course 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.

**Prerequisite:** None

**Corequisite:** AMCA 2110

#### **AMCA 2150 | CNC LATHE MANUAL PROGRAMMING (45-60-5)**

This course 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.

**Prerequisite:** None

**Corequisite:** AMCA 2110



**AMCA 2170 | CNC PRACTICAL APPLICATIONS (15-90-4)**

This course 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.

**Prerequisites:** AMCA 2110, AMCA 2130, AMCA 2150

**AMCA 2190 | CAD/CAM PROGRAMMING (30-60-4)**

**Corequisite:** AMCA 2110

This course emphasizes the development of skills in CAD/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.

**Prerequisite:** None

**Arts****ARTS 1101 | ART APPRECIATION (45-0-3)**

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.

**Prerequisite:** Appropriate Degree Level Writing (English) and Reading Placement Test Scores

**Aircraft Structural Technology****ASTT 1010 | BASIC BLUEPRINT READING (60-0-4)**

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.

**Prerequisite:** None

**ASTT 1020 | AIRCRAFT BLUEPRINT READING (45-0-3)**

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 drawings, and configurated/method/undimensioned drawings.

**Prerequisite:** ASTT 1010

**ASTT 1030 | STRUCTURAL FUNDAMENTALS (42-104-6)**

Introduces the fundamental concepts required in aerospace 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.

**Prerequisite:** None

**Corequisite:** ASTT 1010

**ASTT 1040 | STRUCTURAL LAYOUT AND FABRICATION (48-106-6)**

Continues the development of knowledge and skills required to perform basic aerospace layout and fabrication. Emphasizes the safe use of stationary equipment. Topics

include: machine safety, stationary equipment, bend allowance, fasteners layout, parts fabrication, special fasteners, and geometric functions.

**Prerequisites:** ASTT 1010, ASTT 1030

**Corequisite:** ASTT 1020

**ASTT 1050 | AEROSPACE QUALITY MANAGEMENT (45-0-3)**

Introduces the student to the concept of Aerospace Quality Management Systems used in the American workplace. Topics include: history of quality management, principles of quality, tools used in quality systems, quality team building.

**Prerequisite:** Program admission

**ASTT 1070 | AERODYNAMICS (30-0-2)**

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.

**Prerequisite:** None

**ASTT 1090 | COMPOSITES AND BONDED STRUCTURES (40-50-4)**

Emphasizes the development of knowledge and skills necessary to fabricate and repair bonded and composite aircraft parts. Topics include: safety, terms, classifications and characteristics, inspection techniques, and application.

**Prerequisite:** None

**Corequisite:** ASTT 1040

**ASTT 1100 | SEALANTS (10-40-2)**

Provides instruction in the surface preparation, application, and safe handling of sealants used in the aerospace structures repair and manufacturing industry. Topics include: safety, surface preparation, sealants application, sealants shelf life, sealants cure times, and sealants removal.

**Prerequisite:** None

**Corequisite:** ASTT 1030

**ASTT 1110 | CORROSION CONTROL (50-60-5)**

Emphasizes the development of knowledge and skills necessary to assess damage due to corrosion and take corrective action. Topics include: safety; corrosion theory; corrosion removal, repair, and treatment; and corrosion prevention.

**Prerequisite:** None

**Corequisite:** ASTT 1040

**ASTT 1120 | AIRCRAFT METALLURGY (39-54-4)**

Introduces the types of metals used in aircraft construction and provides a study of their properties and working characteristics. Topics include: safety, types of metals, properties of metals, methods of identification, heat treatments, temper designations, and working characteristics.

**Prerequisites:** ASTT 1040, MATH 1012

**ASTT 1180 | AIRCRAFT TECHNICAL PUBLICATIONS (45-0-3)**

Continues the study of aircraft technical publications found in the manufacturing and repair process. Research skills necessary to locate information in technical publications will be emphasized. Topics include: document control numbers, technical publications, instructional repair manuals, aircraft transport association (ATA) codes, technical orders, tech orders, tech order system, general tech order, aircraft specific, and industry specific manuals.

**Prerequisite:** ASTT 1020  
**Corequisite:** ENGL 1010

## Apartment Industry/Property Management

### AIPM 1101 | APARTMENT INDUSTRY FOUNDATIONS (45-0-3)

This course is designed to orient the student to the management responsibilities of the apartment industry. Topics include an introduction to the apartment industry, apartment marketing and leasing, financial reporting, legal and legislative issues, fair housing, risk management, property management, professional enrichment, and career development.

**Prerequisite:** Program Admission

### AIPM 1115 | APARTMENT INDUSTRY INTERNSHIP (0-135-3)

This course is designed to give students an opportunity to experience the industry work environment and to apply the skills learned in the classroom. Topics include the application of classroom knowledge and skills, use of interpersonal skills, adaptability to the workplace environment, problem solving techniques, and safety.

**Prerequisite:** AIPM 1101, MGMT 1100, MGMT 2120, MKTG 1130

## Automotive Technology

### AUTT 1010 | AUTOMOTIVE TECHNOLOGY INTRODUCTION (15-30-2)

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.

**Prerequisite:** None

### AUTT 1011 | BASIC AUTO MAINTENANCE AND LIGHT REPAIR I (50-85-6)

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

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### AUTT 1012 | AUTO MAINTENANCE AND LIGHT REPAIR II (27-152-6)

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.

**Prerequisite:** AUTT 1010, AUTT 1011

### AUTT 1013 | AUTO MAINTENANCE AND LIGHT REPAIR III (27-152-6)

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

**Prerequisite:** AUTT 1012

### AUTT 1020 | AUTOMOTIVE ELECTRICAL SYSTEMS (30-210-7)

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 systems.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### AUTT 1021 | AUTOMOTIVE ELECTRICAL SYSTEMS I (17-120-4)

Introduces automotive electricity, emphasizes the basic principles, diagnosis, and service/repair of batteries, starting systems, starting system components, and basic lighting systems.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### AUTT 1022 | AUTOMOTIVE ELECTRICAL SYSTEMS II (13-89-3)

This course emphasizes the basic principles, diagnosis, and service/repair of charging systems, advanced lighting systems, instrument cluster and driver information systems, and body electrical systems.

**Prerequisite:** None  
**Corequisite:** AUTT 1021

### AUTT 1030 | AUTOMOTIVE BRAKE SYSTEMS (30-75-4)

Introduces brake systems theory and its application to automotive systems and anti-lock brake system (ABS) to include ABS components and ABS operation, testing, and diagnosis. Topics include: hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; miscellaneous brake components (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; test, diagnose, and service electronic brake control system.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### AUTT 1040 | AUTOMOTIVE ENGINE PERFORMANCE (30-200-7)

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, emission control systems diagnosis and repair.

**Prerequisite:** AUTT 1020 OR AUTT 1021 AND AUTT 1022

### AUTT 1041 | AUTOMOTIVE ENGINE PERFORMANCE I (13-87-3)

This course introduces basic engine performance systems which support and control four stroke gasoline engine operations and reduce emissions. Topics include: general engine diagnosis, fuel and air induction, exhaust systems, PCV control system diagnosis and repair, and other related engine service.

**Prerequisite:** AUTT 1020 OR AUTT 1021 AND AUTT 1022

### AUTT 1042 | AUTOMOTIVE ENGINE PERFORMANCE II (17-113-4)

This course continues basic engine performance systems which support and control four stroke gasoline engine operations and reduce emissions. Topics include: computerized engine controls and diagnosis, ignition system diagnosis and repair, and advanced emission control systems

diagnosis and repair.

**Prerequisite:** AUTT 1020, AUTT 1022

### **AUTT 1050 | AUTOMOTIVE SUSPENSION AND STEERING SYSTEMS (15-110-4)**

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, wheel and tire diagnosis and repair.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### **AUTT 1060 | AUTOMOTIVE CLIMATE CONTROL SYSTEMS (50-60-5)**

This course introduces the theory and operation of automotive heating and air conditioning 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; refrigerant recovery, recycling, and handling.

**Prerequisite:** AUTT 1020

### **AUTT 2010 | AUTOMOTIVE ENGINE REPAIR (30-145-6)**

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.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### **AUTT 2011 | AUTOMOTIVE ENGINE REPAIR I (15-75-3)**

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; basic cylinder heads and valve trains diagnosis and repair; and lubrication and cooling systems diagnosis and repair.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### **AUTT 2012 | AUTOMOTIVE ENGINE REPAIR II (15-70-3)**

This course continues 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 advanced cylinder heads and valve trains diagnosis and repair; and engine blocks assembly, diagnosis and repair.

**Prerequisite:** None  
**Corequisite:** AUTT 2011

### **AUTT 2020 | AUTOMOTIVE MANUAL DRIVE TRAIN AND AXLES (31-69-4)**

This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel 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.

**Prerequisite:** None  
**Corequisite:** AUTT 1010

### **AUTT 2030 | AUTOMOTIVE AUTOMATIC TRANSMISSIONS AND TRANAXLES (30-105-5)**

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.

**Prerequisite:** AUTT 1020

## **Aviation Maintenance Technology**

### **AVMT 1000 | AVIATION MATHEMATICS (30-0-2)**

This course provides students with the knowledge necessary to use and apply mathematical procedures and processes that are applicable to aviation maintenance functions. Topics include performing algebraic operations, extract roots and raise numbers to a given power, determine area and volume of geometrical shapes, and solve ratio, proportion, and percentage problems.

**Prerequisite:** Program admission

### **AVMT 1010 | AIRCRAFT MAINTENANCE REGULATIONS (20-30-2)**

**Prerequisite:** Program admission

This course provides students with the knowledge and skills necessary to select and use FAA and manufacturers' specifications, data sheets, manuals, related regulations, and technical data, write descriptions of aircraft conditions, record work performed, and complete maintenance forms and inspection reports, interpret federal regulations regarding mechanic privileges and limitations. Topics include maintenance publications, maintenance forms and records, and mechanic privileges and limitations.

### **AVMT 1020 | AIRCRAFT APPLIED SCIENCES I (56-59-5)**

This course provides students with the fundamentals of aircraft materials and processes, ground operations and servicing, and aircraft cleaning and corrosion control.

**Prerequisite:** Program admission

### **AVMT 1025 | AIRCRAFT APPLIED SCIENCES II (44-41-4)**

This course provides students with the fundamentals of aircraft drawings, weight and balance, and fluid lines and fittings.

**Prerequisite:** Program admission

### **AVMT 1030 | AIRCRAFT ELECTRICITY AND ELECTRONICS (50-50-5)**

This course provides a study of the relationships of voltage, current, and resistance in aircraft electrical systems, and the use of meters. Alternators, generators, starters, motors, charging systems, basic AC and DC systems, and semiconductor, solid state, and integrated circuit fundamentals are introduced. Topics include determine the relationship of voltage, current, and resistance in electrical circuits, read and interpret electrical circuit diagrams, measure

voltage, current, resistance, and continuity, calculate and measure electrical power, calculate and measure capacitance and inductance, inspect and service batteries, and solid state devices applications.

**Prerequisite:** None  
**Corequisite:** AVMT 1000

#### **AVMT 1210 | AVIATION PHYSICS (30-0-2)**

This course provides students with an introduction to the theory and application of physics to aerospace vehicles and their subsystems. Topics include temperature and heat, pressure, temperature, and volume of air mass, basic aerodynamics and theory of flight, physical factors affecting engine output, relationship of pressure, area, and force, origin of sound, principles of simple machines, and centrifugal and centripetal force.

**Prerequisite:** None  
**Corequisite:** AVMT 1000

#### **AVMT 2010 | AIRCRAFT AIRFRAME STRUCTURES (20-30-2)**

This course presents a survey of aircraft airframe structures used in aircraft. Topics include wood structures, aircraft covering, and aircraft finishes.

**Prerequisite:** Program admission

#### **AVMT 2011 | AIRCRAFT WOOD STRUCTURES, COVERINGS AND FINISHES (10-15-1)**

This course presents a survey of aircraft airframe structures used in various aircraft. Topics include wood structures, aircraft covering, and aircraft finishes.

**Prerequisite:** Program admission

#### **AVMT 2020 | AIRFRAME SHEET METAL (20-42-2)**

This course provides a study of sheet metal airframes. Topics include sheet metal structures, install conventional rivets, install special rivets and fasteners, sheet metal form, lay out and bend, inspect and repair sheet metal structures.

**Prerequisite:** Program admission

#### **AVMT 2025 | AIRFRAME NON-METALLIC STRUCTURES (10-53-2)**

This course provides a study of non-metallic tube and riveted sheet monocoque or semi-monocoque. Topics include identify non-metallic structures, inspect bonded structures, fiberglass structures, composite and honeycomb structures, inspect, check, service and repair windows, doors, and interior furnishings, and laminated structures.

**Prerequisite:** Program admission

#### **AVMT 2030 | AIRFRAME WELDING (10-10-1)**

Provides an introduction to welding skills and tasks used on airframes. Topics include: welding principles; soldering, brazing, gas-welding, and arc-welding steel; welding aluminum and stainless steel; fabricating tubular structures; soldering stainless steel; and welding titanium and magnesium.

**Prerequisite:** Program admission

#### **AVMT 2040 | AIRFRAME ASSEMBLY AND RIGGING (20-30-2)**

This course provides a study of aircraft assembly and rigging configurations. Topics include: use assembly and rigging hand tools and equipment; rig fixed wing aircraft; rig rotary wing aircraft; check alignment of structures; assemble aircraft components, including flight control surfaces; balance, rig, and inspect movable primary and secondary control surfaces;

and jack aircraft.

**Prerequisite:** Program admission

#### **AVMT 2050 | AIRFRAME INSPECTION (30-70-4)**

This course provides instruction for performing airframe inspections with emphasis on developing the skills related to conformity and air worthiness evaluations. Topics include airframe conformity inspection and airframe air worthiness inspection.

**Prerequisite:** None  
**Corequisite:** AVMT 1010, AVMT 1020, AVMT 1025, AVMT 2010 OR AVMT 2011

#### **AVMT 2060 | AIRCRAFT HYDRAULIC AND PNEUMATIC SYSTEMS (20-30-2)**

This course provides a study of the principles of generation, distribution, and management of hydraulic and pneumatic power throughout the aircraft. Topics include identify hydraulic fluids; repair hydraulic and pneumatic power system components; inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems; hydraulic and pneumatic position and warning systems; and inspect, check, troubleshoot, service, and repair aircraft position and warning systems.

**Prerequisite:** Program Admission

#### **AVMT 2070 | AIRCRAFT LANDING GEAR SYSTEMS (30-50-3)**

This course provides a study of aircraft landing gear systems with emphasis on inspection and maintenance procedures of hydraulic and pneumatic power throughout the aircraft structure. Topics include inspect, check, service, and repair landing gear retraction systems and shock struts; inspect, check, service, and repair brakes, wheels, and tires; and inspect, check, service, and repair steering systems.

**Prerequisite:** Program Admission

#### **AVMT 2080 | AIRCRAFT ENVIRONMENTAL CONTROL SYSTEMS (35-45-3)**

This course provides a study of aircraft environmental control systems. Topics include: inspect, check, troubleshoot, service, and repair cabin atmosphere control systems; inspect, check, troubleshoot, service, and repair ice and rain control systems; and inspect, check, troubleshoot, service, and repair fire protection systems.

**Prerequisite:** Program Admission

#### **AVMT 2085 | AIRCRAFT FUEL AND INSTRUMENT SYSTEMS (40-30-3)**

This course provides a study of airframe fuel and instrument systems. Topics include: inspect, check, troubleshoot, service and repair aircraft fuel systems; and inspect, check, troubleshoot, service and repair aircraft instrument systems.

**Prerequisite:** Program Admission

#### **AVMT 2090 | AIRCRAFT ELECTRICAL SYSTEMS (45-55-4)**

This course provides a study of aircraft electrical systems. Topics include: install, check, and service airframe electrical wiring, controls, switches, indicators, and protective devices; inspect, check, troubleshoot, service, and repair alternating and direct current electrical systems; repair and inspect aircraft electrical system components, crimp and splice wiring to manufacturer's specifications, and repair pins and sockets of aircraft connectors; and inspect, check, and troubleshoot constant speed and integrated speed drive generators.

**Prerequisite:** None

**Corequisite:** AVMT 1030

### **AVMT 2095 | AIRCRAFT COMMUNICATION AND NAVIGATION SYSTEMS (25-25-2)**

This course provides a study of aircraft communication and navigation systems. Topics include: inspect, check, and troubleshoot autopilot servos and approach coupling systems; inspect, check, and service aircraft electronic communication and navigation systems including VHF passenger address interphones and static discharge devices, aircraft VOR, ILS LORAN, radar beacon transponders, flight management computers, and GPWS; and inspect and repair antenna and electronic equipment installations.

**Prerequisite:** None  
**Corequisite:** AVMT 1030

### **AVMT 2210 | RECIPROCATING ENGINE POWERPLANTS I (50-0-3)**

This course provides a study of piston engine theory and maintenance including air and water cooled aircraft engines. Topics include: aircraft reciprocating engine theory, and inspect and repair radial engines.

**Prerequisite:** Program Admission

### **AVMT 2220 | RECIPROCATING ENGINE POWERPLANTS II (20-120-4)**

This course continues a study of piston engine theory and maintenance including air and water cooled aircraft engines. Topics include: overhaul a reciprocating engine; inspect, check, service, and repair reciprocating engines and engine installations; install, troubleshoot, and remove reciprocating engines; and perform an aircraft powerplant conformity and air worthiness inspection.

**Prerequisite:** None  
**Corequisite:** AVMT 2210

### **AVMT 2230 | GAS TURBINE POWERPLANTS I (50-0-3)**

This course provides a study of the fundamentals and evolution of the jet engine and jet propulsion. Topics include aircraft gas turbine engine theory and inspect and troubleshoot ducted fan systems and components.

**Prerequisite:** None

### **AVMT 2240 | GAS TURBINE POWERPLANTS II (24-76-3)**

This course continues a study of the fundamentals and evolution of the jet engine and jet propulsion. Topics include: overhaul a turbine engine; install, troubleshoot, and remove turbine engines; inspect, check, service, and repair turbine engines and turbine engine installations; and perform an aircraft powerplant conformity and air worthiness inspection.

**Prerequisite:** None  
**Corequisite:** AVMT 2230

### **AVMT 2260 | AIRCRAFT ENGINE FUEL AND FUEL METERING SYSTEMS (35-75-4)**

This course provides a study of aircraft engine fuel and fuel metering systems. Topics include: repair engine fuel system components; inspect, check, service, troubleshoot, and repair engine fuel systems; troubleshoot and adjust turbine engine fuel metering systems and electronic engine fuel controls; inspect check, service, troubleshoot, and repair reciprocating and turbine engine fuel metering systems; overhaul carburetors; repair engine fuel metering system components; and inspect, check, and service water injection systems.

**Prerequisite:** Program Admission

### **AVMT 2270 | POWERPLANT INSTRUMENTS, FIRE PROTECTION AND ELECTRICAL SYSTEMS (36-39-3)**

This course provides a study of powerplant instruments, fire protection and electrical systems. Topics include: troubleshoot, service, and repair electrical and mechanical fluid rate-of-flow indicating systems; inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and RPM indicating systems; inspect, check, service, troubleshoot, and repair engine fire detection and extinguishing systems; install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices; and repair engine electrical system components.

**Prerequisite:** AVMT 1030

### **AVMT 2275 | POWERPLANT IGNITION AND STARTING SYSTEMS (43-32-4)**

This course provides a study of powerplant ignition and starting systems. Topics include: overhaul magneto and ignition harness; inspect, service, troubleshoot, and repair reciprocating and turbine engine ignition systems and components; inspect, service, troubleshoot, and repair turbine electrical starting systems; and inspect, service, and troubleshoot turbine engine pneumatic starting systems.

**Prerequisite:** AVMT 1030

### **AVMT 2280 | AIRCRAFT POWERPLANT ACCESSORY SYSTEMS (30-45-3)**

This course provides a study of aircraft powerplant accessory systems. Topics include: inspect and maintain aircraft engine lubrication systems; inspect and maintain aircraft engine induction systems; inspect and maintain aircraft engine cooling systems; and inspect and maintain aircraft engine exhaust systems.

**Prerequisite:** AVMT 2210, AVMT 2230

### **AVMT 2285 | AIRCRAFT PROPELLER SYSTEMS (30-45-3)**

This course provides a study of aircraft propeller systems. Topics include propeller theory and fundamentals, inspect and maintain propellers, install, troubleshoot, and remove propellers.

**Prerequisite:** AVMT 2210

## **Banking and Finance**

### **BAFN 1100 | INTRODUCTION TO BANKING AND FINANCE (45-0-3)**

This course introduces the student to the history, documents, and operational functions of the banking industry.

**Prerequisite:** Program Admission

### **BAFN 1105 | BANK BUSINESS AND INFORMATION SYSTEMS (15-60-3)**

The course emphasizes basic calculator functions with problem solving, types of banking equipment, teller skills and duties and procedures for bank reconciliations.

**Prerequisite:** MATH 1011 or MATH 1111

### **BAFN 1110 | MONEY AND BANKING (45-0-3)**

The course emphasizes the relevance of monetary instruments, financial intermediaries, and the central banks as they impact local, state, national, and international economics. Topics include the history and evolution of financial institutions, monetary instruments and flow; and central banking, operations, and policies.

**Prerequisite:** Program Admission

**BAFN 1115 | PERSONAL FINANCIAL PLANNING (30-30-3)**

This course provides knowledge and applications in the management of personal and consumer finance. Topics include record keeping, budgeting, credit principles, investment principles, and forecasting.

**Prerequisite:** Program Admission

**BAFN 2200 | FINANCE (45-0-3)**

This course provides an introduction to financial markets, institutions, and management in contemporary society. Emphasis is placed on developing an understanding of the financial markets in which funds are traded, the financial institutions participating in facilitating the trade of such funds, and the financial principles and concepts behind sound financial management. Topics include financial systems of the United States, business finance management, and financing other sectors of the economy.

**Prerequisite:** ACCT 1100

**BAFN 2205 | REAL ESTATE FINANCE (45-0-3)**

Emphasizes the relevance of land value, legal titles, legal descriptions, types of real estate finance, leverage of real estate, bank funding requirement, mortgage amortizations, financial theory, and real estate markets.

**Prerequisite:** None

**BAFN 2210 | CONTEMPORARY BANK MANAGEMENT (45-0-3)**

This course emphasizes the relevance of banks and the economy, bank regulations and policy, bank organizational structure, bank management, the financial institutions environment, bank deregulation, and asset/liability management.

**Prerequisites:** BAFN 1100, BAFN 1110, BAFN 1115

**BAFN 2215 | INVESTMENTS (45-0-3)**

This course introduces the student to the fundamentals concepts of personal investment planning, personal investments, the various financial investments available for use, and their relative applicability. Emphasis is placed on developing a full understanding of the types of investments available to individuals, how these investments can be used and how to evaluate their performance. Topics include stocks, bonds, mutual funds, retirement planning, retirement plans and investment advisors.

**Prerequisite:** BAFN 1115

**Barbering****BARB 1000 | INTRODUCTION TO BARBER/STYLING IMPLEMENTS (45-0-3)**

Introduction to Barber/Styling Implements is designed to give an overview of the barbering profession. Students are also taught the fundamentals of each barber/styling implement. Emphasis will be placed on the maintenance and care of each implement. Topics include: Barbering history, personality development, professional barbering ethics, and professional barbering image, safety, and reception and telephone techniques, nomenclature, types and sizes, proper use and care, and maintenance.

**Prerequisite:** None  
**Corequisite:** None

**BARB 1010 | SCIENCE: STERILIZATION, SANITATION,****AND BACTERIOLOGY (30-45-3)**

Introduces fundamental theories and practices of bacteriology, sterilization, sanitation, safety, and the welfare of the barber/stylist and patron. Topics include: sterilization, sanitation, safety, bacteriology, and Hazardous Duty Standards Act compliance.

**Prerequisite:** None  
**Corequisite:** None

**BARB 1022 | HAIRCUTTING AND SHAMPOOING (15-75-3)**

This course introduces the theory and skills necessary to apply basic haircutting techniques. Safe use of haircutting implements are stressed. The course also introduces the fundamental theory and skills required to shampoo hair. Laboratory training includes shampooing a live model. Topics include patron preparation, haircutting terminology, safety and sanitation, implements, basic haircutting techniques, shampoo chemistry, and shampoo procedures.

**Prerequisite:** None

**BARB 1024 | HAIRCUTTING AND SHAMPOOING II (15-75-3)**

This course continues the theory and skills necessary to apply basic haircutting techniques. Safe use of haircutting implements are stressed. The course also introduces the fundamental theory and skills required to shampoo hair. Laboratory training includes shampooing a live model. Topics include patron preparation, haircutting terminology, safety and sanitation, implements, basic haircutting techniques, shampoo chemistry, and shampoo procedures.

**Prerequisite:** None

**BARB 1030 | HAIRCUTTING/BASIC STYLING (15-90-3)**

Continues the theory and application of haircutting techniques and introduces hairstyling. Topics include: introduction to styling, client consultation, head and hair analysis, style cutting techniques, and implements for style cutting and tapering techniques

**Prerequisite:** None  
**Corequisite:** None

**BARB 1040 | SHAVING (15-75-3)**

Introduces the theory and skills necessary to prepare and shave a patron. Simulated shaving procedures will precede practice on live models. Topics include: patron preparation, beard preparation, shaving techniques, once-over shave techniques, and safety precautions.

**Prerequisite:** None  
**Corequisite:** None

**BARB 1050 | SCIENCE: ANATOMY AND PHYSIOLOGY (45-0-3)**

Develops knowledge of the function and care of the scalp, skin, and hair. Emphasis is placed on the function, health, and growth of these areas. Topics include: cells, skeletal system, muscular system, nervous system, circulatory system, and related systems.

**Prerequisite:** None  
**Corequisite:** None

**BARB 1060 | INTRODUCTION TO COLOR THEORY/ COLOR APPLICATION (15-75-3)**

Introduces the fundamental theory of color, predispositions tests, color selection, and color application. Presents the application of temporary, semi-permanent, and permanent

hair coloring products. Topics include: basic color concepts, skin reactions, the color wheel, color selection and application, mustache and beards, coloring products, safety precautions and tests, mixing procedures, color selection and application.

**Prerequisite:** None

**Corequisite:** None

### **BARB 1072 | INTRODUCTION TO CHEMICAL RESTRUCTURING OF HAIR (15-75-3)**

This course introduces the chemistry and chemical reactions of permanent wave solutions and relaxers. It provide instruction in the application of permanent waves and hair relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Application of perms and relaxers on live models is included. Topics include permanent wave techniques, safety procedures, chemical relaxer techniques, and permanent wave and chemical relaxer, application procedures on manikins, timed permanent wave, timed relaxer applications, safety precautions, and Hazardous Duty Standard Act.

**Prerequisite:** None

### **BARB 1074 | ADVANCED CHEMICAL RESTRUCTURING OF HAIR (15-75-3)**

This course builds on the Introduction to Chemical Restructuring of Hair course to address advanced theory and practice relating to the chemistry and chemical reactions of permanent waves and hair relaxers. It provides continuing instruction in the precautions and special problems involved in the application of permanent waves and relaxers. Application of perms and relaxers on live models is included. Topics include permanent wave techniques, safety procedures, chemical relaxer techniques, application procedures on manikins, times permanent wave, timed relaxer applications, and Hazardous Duty Standard Act.

**Prerequisite:** None

### **BARB 1082 | ADVANCED HAIRCUTTING AND STYLING I (0-120-3)**

This course continues instruction in the theory and application of haircutting and styling techniques. Topics include elevation and design cutting, introduction to hairpieces, blow-dry styling, thermal waving and curling, advanced haircutting and styling; use of clippers, shears, and razor; permanent waving and styling; shaving techniques and beard trimming.

**Prerequisite:** None

### **BARB 1084 | ADVANCED HAIRCUTTING AND STYLING II (0-135-3)**

This course continues instruction in the theory and application of haircutting and styling techniques. Topics include elevation and design cutting, introduction to hairpieces, blow-dry styling, thermal waving and curling, advanced haircutting and styling; use of clippers, shears, and razor; permanent waving and styling; shaving techniques and beard trimming.

**Prerequisite:** None

### **BARB 1090 | STRUCTURES OF SKIN, SCALP, HAIR AND FACIAL TREATMENTS (15-90-3)**

Introduces the theory, procedures, and products used in the care and treatment of the skin, scalp, and hair. Provides instruction on the theory and application of techniques in the treatment of the skin, scalp, and hair; and introduces the theory and skills required in massaging the face, preparing the patron for facial treatment, and giving facial treatments for various skin conditions. Benefits of facial treatments and massage will be emphasized. Emphasis will be placed

on work with live models. Topics include: treatment theory, basic corrective hair and scalp treatments, plain facial, products and supplies, disease and disorders, implements, products and supplies, diseases and disorders, corrective hair and scalp treatments, facial procedures and manipulations, and safety precautions, theory of massage, preparation of patron for massage, massage procedures, facial treatment, types of facials, and facial treatment benefits.

**Prerequisite:** None

**Corequisite:** None

### **BARB 1100 | BARBER/STYLING PRACTICUM NAD INTERNSHIP (0-135-3)**

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 or in a combination of a laboratory setting and an approved internship facility. Topics include: haircutting/styling, hairstyling texturizing, shaving, beard trimming, thermal waving, hairpiece fitting and styling, safety precautions, and licensure preparation.

**Prerequisite:** None

**Corequisite:** None

### **BARB 1110 | SHOP MANAGEMENT/OWNERSHIP (15-90-3)**

Emphasizes the steps involved in opening and operating a privately owned cosmetology salon or barber/styling shop. Topics include: planning a salon/shop, business management, retailing, public relations, sales skills, client retention, and entrepreneurship.

**Prerequisite:** None

**Corequisite:** None

### **BARB 2010 | INTRODUCTION AND APPLICATION TO BARBER INSTRUCTION (30-60-4)**

Introduces the fundamental theory and practices and basic record keeping concepts of the barbering instructor profession. Emphasis will be placed on fostering and providing educational training in the field of Barbering. Topics include: state and local laws, rules and regulations, professional image, effective communication, theory of instruction, Hazardous Duty Standards Act Compliance, various career opportunities, attendance, grades, student service and theory hours, basic record keeping and effective use of advisory committee.

**Prerequisite:** Program Admission

**Corequisite:** None

### **BARB 2020 | PROGRAM DEVELOPMENT (30-105-5)**

Emphasizes the steps involved in the development of a great lesson plan and measuring the knowledge of learners. Topics include: development of curriculum, instructional outcomes, components of a lesson plan, using printed materials and visual aids in a lesson plan, purpose of testing, academic policy, developing rubrics, multiple-category grading system and special learner needs.

**Prerequisite:** None

**Corequisite:** None

### **BARB 2030 | CLASSROOM/LAB MANAGEMENT (30-90-5)**

Emphasizes the steps involved in the operation of a barbering program, teaching skills, classroom management and dynamic clinic teaching. Topics include: identify entry-level practitioners in hair, skin and nails, teaching effective communication skills, inventory, networking, portfolio design, managing learner behavior, managing difficult learners,

classroom arrangements, role of the clinic environment and basic principles of academic advising and counseling.

**Prerequisite:** None

**Corequisite:** None

### **BARB 2040 | TEACHING SKILLS AND TECHNIQUES (30-105-5)**

Provides knowledge and application on the principles of teaching and identifies the characteristics of the different learner types and teaching methods. Topics include: educator to learner relationships, effective and reflective listening skills, emotional influences and needs of today's learner, destructive versus constructive tactics, learner motivation, cultivating positive relationships, challenges for all learner styles, timed lecturing, and preparing for a lecture method of teaching.

**Prerequisite:** None

**Corequisite:** None

### **BARB 2050 | BARBERING PRACTICUM (0-135-3)**

Provides a experience necessary for professional development and completion of requirements for Instructor training state licensure requirements. Emphasis will be placed on the trainees display of professional conduct, positive attitude, and evaluation of learners in a lab setting. The requirements for this course may be met in a laboratory setting. Topics include monitoring and evaluating in the following areas: 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.

**Prerequisites:** BARB 2010, BARB 2020, BARB 2030, BARB 2040

**Corequisite:** BARB 2010, BARB 2020, BARB 2030, BARB 2040

### **BARB 2060 | BARBERING PRACTICUM II (0-135-3)**

Provides experience necessary for professional development and completion of requirements for Instructor training state licensure requirements. Emphasis will be placed on the trainees display of professional conduct, positive attitude, and evaluation of learners in a lab setting. The requirements for this course may be met in a laboratory setting. Topics include monitoring and evaluating in the following areas: 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.

**Prerequisite:** BARB 2050

**Corequisite:** BARB 2050

## **Business-Customer Service Technology**

### **BCST 1000 | INTERPERSONAL DEVELOPMENT (30-0-2)**

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.

**Prerequisite:** None

### **BCST 1010 | SURVEY OF TECHNOLOGY (15-60-3)**

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 2010 operating environment, word processing, spreadsheets, databases, and electronic animated presentations.

**Prerequisite:** None

### **BCST 1020 | OFFICE MANAGEMENT (30-0-2)**

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.

**Prerequisite:** None

### **BCST 1030 | ADVANCED OFFICE MANAGEMENT (30-0-2)**

This course provides students with skills necessary to communicate with customers and successfully manage the 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.

**Prerequisite:** None

## **Building and Facility Maintenance**

### **BFMT 1040 | BUILDING CLIMATE CONTROLS (30-30-3)**

Provides instruction in heating and cooling control systems used in modern residential and commercial structures. Topics include thermostats, valves and dampers, pneumatic controls, and refrigeration system schematics and symbols.

**Prerequisite:** None

## **Biology**

### **BIOL 1111 | BIOLOGY I (45-0-3)**

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, and biotechnology.

**Prerequisite:** Regular Admission

**Corequisite:** BIOL 1111L

### **BIOL 1111L | BIOLOGY LAB I (0-45-1)**

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.

**Prerequisite:** Regular Admission

**Corequisite:** BIOL 1111

### **BIOL 1112 | BIOLOGY II (45-0-3)**

Provides an introduction to basic evolutionary concepts. Also, the course emphasizes 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



principles of evolution, classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

**Prerequisite:** BIOL 1111, BIOL 1111L

**Corequisite:** BIOL 1112L

### **BIOL 1112L | BIOLOGY LAB II (0-45-1)**

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

**Prerequisite:** BIOL 1111, BIOL 1111L

**Corequisite:** BIOL 1112

### **BIOL 2113 | ANATOMY AND PHYSIOLOGY I (45-0-3)**

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.

**Prerequisite:** Regular Admission

**Corequisite:** BIOL 2113L, ENGL 1101

### **BIOL 2113L | ANATOMY AND PHYSIOLOGY LAB I (0-45-1)**

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.

**Prerequisite:** Regular Admission

**Corequisite:** BIOL 2113, ENGL 1101

### **BIOL 2114 | ANATOMY AND PHYSIOLOGY II (45-0-3)**

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.

**Prerequisite:** BIOL 2113, BIOL 2113L

**Corequisite:** BIOL 2114L

### **BIOL 2114L | ANATOMY AND PHYSIOLOGY LAB II (0-45-1)**

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.

**Prerequisite:** BIOL 2113, BIOL 2113L

**Corequisite:** BIOL 2114

### **BIOL 2117 | INTRODUCTORY MICROBIOLOGY (45-0-3)**

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.

**Prerequisite:** BIOL 2113 and BIOL 2113L or BIOL 1111 and BIOL 1111L

**Corequisite:** BIOL 2117L

### **BIOL 2117L | INTRODUCTORY MICROBIOLOGY LAB**

### **(0-45-1)**

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.

**Prerequisite:** BIOL 2113 and BIOL 2113L or BIOL 1111 and BIOL 1111L

**Corequisite:** BIOL 2117

## **Biomedical Electronics Technology**

### **BMET 1231 | MEDICAL EQUIPMENT FUNCTION AND OPERATION I (45-45-4)**

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.

**Prerequisite:** None

### **BMET 2242 | MEDICAL EQUIPMENT FUNCTION AND OPERATION II (45-45-4)**

This course 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.

**Prerequisite:** ALHS 1010 or ALHS 1011; BMET 1231

### **BMET 2343 | INTERNSHIP MEDICAL SYSTEMS (15-90-3)**

This course 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 cost, and professional development.

**Prerequisite:** BMET 1231

## **Biotechnology**

### **BTEC 1010 | INTRODUCTION TO BIOTECHNOLOGY (30-0-2)**

Introduces students to biotechnology. Topics include an overview of biotechnology, the basics of cell biology, genetic engineering, manufacturing, and plant anatomy and tissue culture.

**Prerequisite:** Program admission

### **BTEC 2010 | BIOTECHNOLOGY MATH APPLICATIONS (64-31-5)**

This course trains students on mathematical applications applicable to biotechnology. Topics include calculations involving concentration, dilution, solution preparation, cell growth, serial dilution, molarity and oligonucleotides.

**Prerequisite:** MATH 1111

### **BTEC 2050 | BIOTECH LAB METHODS AND TECHNIQUES (60-30-5)**

Introduces the basic skills and knowledge required in biological and chemical laboratories. Emphasis is placed on safety, documentation, measurement, spectrophotometry,

polymerase chain reaction and laboratory solutions.

**Prerequisites:** CHEM 1212, BTEC 2010

### **BTEC 2100 | CELL CULTURE (30-60-4)**

Covers the culturing and maintenance of various cell types. Examples include culturing and maintenance of bacteria, yeast, animal and plant cells.

**Prerequisite:** BIOL 2117

### **BTEC 2105 | ORGANIC AND BIOCHEMISTRY (45-30-4)**

Introduces students to organic and biochemistry. Topics include naming organic compounds, reactivities of organic functional groups, and the structure and function of biomolecules such as carbohydrates, lipids, proteins, nucleic acids and enzymes.

**Prerequisite:** CHEM 1212

### **BTEC 2110 | BIOPROCESSING/PRODUCTION (45-22-4)**

Provides training on how biological products are produced and purified. Topics include fermentation, cell culture, product separation and product purification.

**Prerequisites:** BTEC 2100, BIOL 2117

### **BTEC 2150 | MOLECULAR BIOLOGY (45-30-4)**

This is an introductory molecular biology course. It includes introduction to cells and cell research with a molecular biology approach. It will include chapters in fundamental molecular biology and flow of genetic information.

**Prerequisite:** BIOL 2117

### **BTEC 2300 | ENVIRONMENTAL TECHNOLOGY (60-0-4)**

This course provides an overview of the environmental technology arena with emphasis on water supply, waste management and pollution control. Topics include pollution of air, water, and soil, pollution prevention, basic concepts of environmental technology, storm water management and wastewater treatment.

**Prerequisite:** BTEC 2010

### **BTEC 2500 | BIOTECHNOLOGY INTERSHIP (0-135-3)**

This course is an internship course in which students practice skills in a laboratory and/or processing environment.

**Prerequisites:** BIOL 2117, BIOL 2117L, BTEC 2100, Advisor approval.

## **Business Technology**

### **BUSN 1000 | COMPUTERS IN HEALTHCARE (15-60-3)**

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.

**Prerequisite:** None

### **BUSN 1015 | INTRODUCTION TO MEDICAL INSURANCE (60-0-4)**

This course is designed to increase efficiency and streamline administrative procedures for insurance coding and billing.

Topics include documentation in the medical record, diagnostic code selections, types of insurance, Medicare compliance policies related to documentation and confidentiality, and HIPAA and other compliance regulations.

**Prerequisite:** ALHS 1090

### **BUSN 1100 | INTRODUCTION TO KEYBOARDING (15-60-3)**

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.

**Prerequisite:** None

### **BUSN 1180 | COMPUTER GRAPHICS AND DESIGN (15-60-3)**

Introduces how to design and transmit electronic communications, create graphics on-line, and insert animation and sound to computer-generated charts graphs and diagrams.

**Prerequisite:** COMP 1000

### **BUSN 1190 | DIGITAL TECHNOLOGIES IN BUSINESS (15-30-2)**

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

**Prerequisite:** COMP 1000

### **BUSN 1200 MACHINE TRANSCRIPTION (15-30-2)**

This course emphasizes transcribing mailable documents from dictation using word processing software. Topics include: equipment and supplies, maintenance and usage, work area management, transcription techniques, productivity, and accuracy proofreading and language arts skills.

**Prerequisite:** BUSN 1440, COMP 1000, ENGL 1010

### **BUSN 1210 | ELECTRONICS CALCULATORS (15-30-2)**

Develops skill in the use of electronic calculators to interpret, solve, and record results of various types of problems involving the four arithmetic processes. Topics include: machine parts and features, touch system techniques, and arithmetic applications.

**Prerequisite:** None

### **BUSN 1220 | TELEPHONE TRAINING (15-30-2)**

This course familiarizes the student with the proper use of current telephone technology to include equipment techniques and attributes.

**Prerequisite:** None

### **BUSN 1230 | LEGAL TERMINOLOGY (45-0-3)**

This course introduces the spelling, pronunciation, definition, and usage of basic legal terms. The course broadly covers general law terms as well as specialized legal terminology. Topics include: word origins, word building, abbreviations and symbols correct spelling, pronunciation and meanings of terminology related to the court system, contracts, family law, real estate, litigation, wills/probate, bankruptcy and other areas of the law.

**Prerequisite:** None

**BUSN 1240 | OFFICE PROCEDURES (30-30-3)**

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.

**Prerequisite:** COMP 1000

**BUSN 1250 | RECORDS MANAGEMENT (30-30-3)**

This course introduces records management concepts for use in any office environment. Topics include: basic records management concepts, alphabetic numeric subject and geographic filing, records retention, transfer and disposition of records.

**Prerequisite:** None

**BUSN 1300 | INTRODUCTION TO BUSINESS (45-0-3)**

This course 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.

**Prerequisite:** Program Admission

**BUSN 1310 | INTRODUCTION TO BUSINESS CULTURE (45-0-3)**

This course provides skills and attitudes necessary to function effectively both professionally and interpersonally in the workplace. Topics include: health and wellness, exercise, stress time and money management, work ethics, wardrobe on the job, workplace communications; and business, entertainment, travel and international culture.

**Prerequisite:** Program Admission

**BUSN 1320 | BUSINESS INTERACTION SKILLS (45-0-3)**

This course equips students with the tools to communicate and interact more effectively in person, in writing, and on the telephone with both internal and external customers. Participants also learn how to work in teams to create a collaborative environment for accomplishing goals. Topics include: language of business, communication skills, working with information, business writing, team and collaborative skills, and resolving interpersonal conflict.

**Prerequisite:** None

**BUSN 1330 | PERSONAL EFFECTIVENESS (45-0-3)**

This course focuses on the skills needed to be effective in the corporate environment. Students learn the importance of effectively managing time, stress, and change as they relate to work behavior and quality of work. Topics include: time management, stress management, interview skills/job development, resume writing and managing change.

**Prerequisite:** None

**BUSN 1340 | CUSTOMER SERVICE EFFECTIVENESS (30-30-3)**

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.

**Prerequisite:** None

**BUSN 1400 | WORD PROCESSING APPLICATIONS (30-60-4)**

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.

**Prerequisite:** COMP 1000

**BUSN 1410 | SPREADSHEET CONCEPTS AND APPLICATIONS (30-60-4)**

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.

**Prerequisite:** COMP 1000

**BUSN 1420 | DATABASE APPLICATIONS (30-60-4)**

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.

**Prerequisite:** COMP 1000

**BUSN 1430 | DESKTOP PUBLISHING AND PRESENTATION APPLICATIONS (30-60-4)**

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.

**Prerequisite:** COMP 1000

**BUSN 1440 | DOCUMENT PRODUCTION (15-90-4)**

This course 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:** The ability to key 28 GWAM on 3-minute timings with no more than 3 errors or BUSN 1100.

**BUSN 2160 | ELECTRONIC MAIL APPLICATIONS (15-30-2)**

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.

**Prerequisite:** COMP 1000

### **BUSN 2170 | WEB PAGE DESIGN (15-30-2)**

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.

**Prerequisite:** Program Admission, COMP 1000

### **BUSN 2180 | SPEED AND ACCURACY KEYING (0-30-1)**

Further develops speed and accuracy through analysis of keying and prescribed practice drills. Topics include: building speed, accuracy, and straight-copy proofreading.

**Prerequisite:** BUSN 1100 or the ability to key 25 GWAM on 3-minute timings with no more than 3 errors.

### **BUSN 2190 | BUSINESS DOCUMENT PROOFREADING AND EDITING (15-60-3)**

This course 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.

**Prerequisite:** ENGL 1010 or ENGL 1101

**Corequisite:** BUSN 1440

### **BUSN 2200 | OFFICE ACCOUNTING (45-30-4)**

This course 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.

**Prerequisite:** Program Admission

### **BUSN 2210 | APPLIED OFFICE PROCEDURES (15-60-3)**

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.

**Prerequisite:** BUSN 1240, BUSN 1400, BUSN 1410, BUSN 1440

**Corequisite:** BUSN 2200 or ACCT 1100, BUSN 2190

### **BUSN 2220 | LEGAL ADMINISTRATIVE PROCEDURES (15-60-3)**

Emphasizes essential skills required for the legal office. Topics include: legal terminology, preparation of legal documents and correspondence, ethics, and legal office tasks.

**Prerequisite:** BUSN 1230

**Corequisite:** BUSN 1440

### **BUSN 2230 | OFFICE MANAGEMENT (45-0-3)**

This course provides 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.

**Prerequisite:** BUSN 1240

### **BUSN 2240 | BUSINESS ADMINISTRATIVE ASSISTANT INTERNSHIP I (0-180-4)**

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 Technology program faculty and/or persons designated to coordinate work experience arrangements.

**Prerequisite:** Must be in last semester of program. With advisor approval may take concurrently with last semester courses.

### **BUSN 2250 | BUSINESS ADMINISTRATIVE ASSISTANT INTERNSHIP II (0-270-6)**

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 Technology program faculty and/or persons designated to coordinate work experience arrangements.

**Prerequisite:** Must be in last semester of program. With advisor approval may take concurrently with last semester courses.

### **BUSN 2300 | MEDICAL TERMINOLOGY (30-0-2)**

This course 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.

**Prerequisite:** Program Admission

### **BUSN 2310 | ANATOMY AND TERMINOLOGY FOR THE MEDICAL ADMINISTRATIVE ASSISTANT (45-0-3)**

This course 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.

**Prerequisite:** Program Admission

### **BUSN 2320 | MEDICAL DOCUMENT PROCESSING/TRANSCRIPTION (15-90-4)**

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.

**Prerequisite:** BUSN 2300 or ALHS 1090 and ALHS 1010 or ALHS 1011 or BUSN 2310; BUSN 1440; ENGL 1010

### **BUSN 2330 | ADVANCED MEDICAL DOCUMENT PROCESSING/TRANSCRIPTION (15-90-4)**

This course 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.

**Prerequisite:** BUSN 2320

### **BUSN 2340 | MEDICAL ADMINISTRATIVE PROCEDURES**

**(30-60-4)**

Emphasizes essential skills required for the medical office. Introduces the knowledge and skills of procedures for billing purposes. Introduces the basic concept of medical administrative assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical 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 medical administrative assisting procedures, medical regulations ethics, medical records management, scheduling appointments, health insurance, billing/collection, work area management, resource utilization, and office equipment.

**Prerequisite:** BUSN 2300 or ALHS 1090 and BUSN 2310 or ALHS 1010 or ALHS 1011; BUSN 1440; COMP 1000

**BUSN 2350 | ELECTRONIC HEALTH RECORDS (15-60-3)**

This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, and maintenance of electronic health records and computerized office management. Topics include: electronic health 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 health 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 and HIPAA security.

**Prerequisite:** BUSN 1010 only, or BUSN 2300 or ALHS 1090 and BUSN 2310 or ALHS 1011, BUSN 1100, COMP 1000

**BUSN 2360 | ACUTE CARE MEDICAL TRANSCRIPTION (30-60-4)**

This course helps develop a high level of speed and accuracy in the transcription of medical reports in an acute care setting. Topics include: equipment and supplies maintenance and usage, work area management, pronunciation, spelling, definitions, punctuation, typing speed and accuracy, and resource utilization.

**Prerequisite:** BUSN 2300 or ALHS 1090 and BUSN 2310 or ALHS 1010 or ALHS 1011; BUSN 1440; BUSN 2320; ENGL 1010

**BUSN 2370 | MEDICAL OFFICE BILLING/CODING/INSURANCE (30-30-3)**

This course provides an introduction to medical coding skills and applications of international coding standards for billing of health care services. Provides the knowledge and skills to apply coding of diagnostic statements and procedures for billing purposes. Provides an introduction to medical coding as it relates to health insurance. Topics include: International classification of diseases, code book formats, coding techniques, formats of the ICD and CPT manuals, health insurance; billing reimbursement and collections, and managed care.

**Prerequisite:** BUSN 2300 or ALHS 1090 and BUSN 2310 or ALHS 1010 or ALHS 1011

**BUSN 2380 | MEDICAL ADMINISTRATIVE ASSISTANT INTERNSHIP I (0-180-4)**

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.

**Prerequisite:** Must be in last semester of program. With advisor approval may take concurrently with last semester courses.

**BUSN 2390 | MEDICAL ADMINISTRATIVE ASSISTANT INTERNSHIP II (0-270-6)**

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.

**Prerequisite:** Must be in last semester of program. With advisor approval may take concurrently with last semester courses.

**Cabinetmaking****CABT 1080 | CABINET DESIGN AND LAYOUT (15-60-3)**

This course provides instruction in the planning, design, and layout of cabinet units. Emphasis will be placed on adherence to blueprint specifications. Topics include: parts identification, cabinet styles and floor plan arrangements, estimation procedures, layout to specifications, shop working sketches, shop management and CAD.

**Prerequisites:** COFC 1030, COFC 1050

**CABT 1110 | WOOD JOINTS AND FASTENING METHODS (30-120-5)**

Introduces the fundamentals of wood joint identification, layout, cutting, and assembly, and the variety of fastening methods used in cabinetmaking. Emphasis will be placed on the safe construction of wood joints used.

**Prerequisites:** COFC 1030, COFC 1050

**CABT 1114 | CABINET COMPONENTS (30-30-3)**

Instruction provides application of tool and equipment use techniques to the task of cutting out cabinet components. Topics include: equipment safety, frame member, cutting, shelving cutting, drawer component and door cutting, and material optimizing.

**Prerequisites:** CABT 1110, COFC 1030, COFC 1050

**CABT 1116 | CABINET ASSEMBLY I (30-120-5)**

Provides instruction in the fundamental procedures used for assembly of cabinet bases, wall units, and face frames.

**Prerequisites:** CABT 1110, CABT 1114

**CABT 1117 | CABINET ASSEMBLY II (30-120-5)**

This course is a continuation of Cabinet Assembly I and provides instruction in the assembly of door assembly, ends assembly, back assembly, joint assembly, and bracing. Further instruction is also included in the assembly of base cabinets and wall units.

**Prerequisite:** CABT 1116

**CABT 1118 | DOOR, DRAWER, AND HARDWARE INSTALLATION (15-45-2)**

This course introduces procedures for the installation of assembled drawers, doors, and related hardware. Emphasis will be placed on the safe use of hand and power tools. Topics include: tool safety, hardware identification and installation, door installation, and drawer installation.

**Prerequisite:** None

**Corequisite:** CABT 1116, CABT 1117

**CABT 1120 | LAMINATES AND VENEERS (15-45-2)**

This course introduces procedures for the application of plastic laminates and wood veneers. Topics include: laminate, veneer, and glue identification; cutting and fitting procedures; gluing procedures; trimming and edge banding; special tool use; safety precautions; and counter top cutting.

**Prerequisite:** None

**Corequisite:** CABT 1116, CABT 1117

**CABT 1122 | CABINET FINISHING AND INSTALLATION (15-75-3)**

Provides instruction in surface preparation, wood finishing procedures, and transporting and installation of cabinets. Finishing procedures will emphasize the use of spray equipment. Topics include: fire prevention, air pollutant, reduction, abrasives identification, finishing materials identification, surface preparation, surface treatment application, repair and touch up procedures, hazardous material disposal, safe use of ladders and scaffolds, cabinet transporting and installation, cabinet trim procedures, and finishing techniques.

**Prerequisite:** None

**Corequisite:** CABT 1116, CABT 1117

**CABT 1340 | CNC WOODWORKING I (15-90-3)**

Provides instruction in the use of computer software packages dealing with cabinet and millwork part design. Topics include: programming methods for creating parts, use of geometric drawings, tool selection, saving files, and parts production.

**Prerequisite:** CABT 1117

**CABT 1350 | CNC WOODWORKING II (15-90-3)**

Provides instruction in use of CAD files with CNC machines, machine operation, and maintenance. Topics include: overview of software, machine operation safety, CNC machine operation, material preparation, tooling, data manipulation, production analysis, and maintenance of equipment.

**Prerequisite:** CABT 1340

**CABT 1360 | EUROPEAN 32mm CONSTRUCTION (15-75-3)**

Provides instruction in European 32mm design and construction. Topics include: tool and equipment safety, design and layout, machining operations, construction, and hardware installation.

**Prerequisite:** CABT 1117

**CABT 1370 | SHOP MANAGEMENT (15-30-2)**

This course will introduce the students to principles and practices required in the operation of a custom cabinet and architectural millwork shop. Topics include: health and safety regulations, workflow and shop organization, job estimation, equipment maintenance, and shop safety.

**Prerequisite:** None

**CABT 1380 | FURNITURE FABRICATION (15-45-2)**

Provides instruction in the layout and assembly of furniture. Topics include tool safety, furniture drawings interpretation, furniture components, assembly, and special techniques.

**Prerequisite:** CABT 1117

**CABT 2300 | CABINETMAKING INTERNSHIP/PRACTICUM (0-225-5)**

This course provides the student the opportunity for occupational-based instruction in either an off-site internship

or on-site project experience. The student will be expected to demonstrate all of the applicable skills learned during program study.

**Prerequisite:** Advisor Approval

**Carpentry****CARP 1000 | FUNDAMENTAL CARPENTRY SKILLS (45-45-4)**

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.

**Pre-requisites:** None

**CARP 1015 | STRUCTURAL FRAMING (45-60-5)**

Structural Framing describes the layout and construction procedures for floor, wall, ceiling, and roof 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.

**Pre-requisites:** None

**CARP 1025 | INTERMEDIATE CARPENTRY TECHNIQUES (45-45-4)**

Intermediate Carpentry Techniques completes the "rough-in" phase of building a structure. This course includes building envelope systems, stair framing, roof coverings, thermal and moisture protection, exterior finishes, and reading drawings.

**Pre-requisites:** None

**Corequisite:** COFC 1080

**CARP 1035 | ADVANCED CARPENTRY PROCEDURES (45-60-5)**

Advanced Carpentry Procedures continues the progression of carpentry skills to include specialty skills including steel framing, drywall installation and finishing, suspended ceilings, door and drawer hardware, and interior finish trim procedures.

**Pre-requisites:** None

**CARP 1055 | ADVANCED RESIDENTIAL CARPENTRY (45-60-5)**

Advanced Residential Carpentry contains the culmination of skills needed to be a journeyman residential carpenter. Topics in this course include cabinet fabrication and installation, advanced wall systems, advanced stair systems, and crew leader skills.

**Pre-requisites:** None

**CARP 1056 | ADVANCED COMMERCIAL CARPENTRY (45-60-5)**

Advanced Commercial Carpentry contains the culmination of skills needed to be a journeyman commercial carpenter. Topics in this course include rigging equipment and practices, advanced roof systems, introduction to welding, commercial finish work, and crew leader skills.

**Pre-requisites:** None

**CARP 1070 | SITE LAYOUT, FOOTINGS, AND FOUNDATIONS (30-30-3)**

Introduces the concepts and practices of basic site layout, footings, and foundation construction. Students will use layout equipment for on-site laboratory practice. Topics include: zoning restrictions and building codes, batter board installation, squaring methods, footings, plot plan interpretation, the nature of concrete, building layout, materials estimation, foundation types, foundation forms, and edge forms.

**Prerequisite:** None

#### **CARP 1105 | FLOOR, WALL, AND STAIR FRAMING (30-60-4)**

This course provides instruction in framing materials and estimation and framing production of floors, walls, and stairs. Topics include estimation and computation procedures, rough layouts, and installation procedures.

**Prerequisite:** None

#### **CARP 1110 | CEILING AND ROOF FRAMING (30-60-4)**

This course provides instruction in the theory and practical application of skills required to construct ceiling and roof framing. Topics include systems and materials identification, layout procedures, installation procedures, cost and materials estimation, and safety precautions.

**Prerequisite:** None

#### **CARP 1112 | EXTERIOR FINISHES AND ROOF COVERINGS (30-60-4)**

Introduces materials identification, estimation, and installation procedures for exterior finishes and roof covering, including window and door installation. Topics include: doors and windows, siding trim, roofing types, materials identification, materials estimation, and installation procedures.

**Prerequisite:** None

#### **CARP 1114 | INTERIOR FINISHES (30-60-4)**

This course introduces the procedures and methods for identifying materials, cost estimating, and installation of interior finishes and trim. Topics include materials identification; cost estimating, trim, insulation, doors, gypsum wallboard, and paneling used in finishing jobs.

**Prerequisite:** None

#### **CARP 1310 | DOORS AND DOOR HARDWARE (15-30-2)**

Provides instruction in the identification and installation of a variety of doors, frames, and door hardware for commercial construction applications. Topics include: door types, door hardware, thresholds, weather-stripping, and overhead doors.

**Prerequisite:** None

#### **CARP 1320 | SITE DEVELOPMENT, CONCRETE FORMING, AND RIGGING AND REINFORCING (30-60-4)**

This course provides instruction in the development of construction sites with an emphasis on surveying, materials and processes for concrete forming and usage, and the various methods and materials used in the handling and rigging of steel components.

**Prerequisite:** None

### **Cardiovascular Technology**

#### **CAVT 1002 | MEDICAL PHYSICS (15-30-2)**

In this course the student is introduced to theory of medical instrumentation and physics found in the cardiovascular

sciences. Performance of laboratory procedure is used to reinforce understanding of biomedical applications of equipment and uses as well as proper technique in safety. Topics include: electrical circuit theory, hospital equipment safety and medical instruments and equipment.

**Prerequisite:** Program Admission

#### **CAVT 1020 | CARDIAC CATHETERIZATION I (15-90-4)**

This course includes an intensive study of the role of the Cardiovascular Technology student in the various diagnostic invasive cardiac catheterization procedures such as right and left heart procedures, temporary pacemakers, Swan-Ganz catheters, and coronary angioplasty. This includes identification of angiographic images and data as well as basic principles, special techniques in cardiac catheterization, and interventional techniques. Additional topics include emergency life support, cardiac pharmacology, and cardiac pathology and advance cardiac life support.

**Prerequisite:** None

**Corequisite:** CAVT 1021, CAVT 1080

#### **CAVT 1021 | CARDIAC CATHETERIZATION CLINICAL I (0-135-3)**

Clinical prep will provide hands-on experience and will serve as an introduction to the competencies, rotations, and expectations of the student while in the cardiac catheterization lab in a student capacity. Topics include: ethical and legal behavior in the catheterization laboratory, environmental safety in the catheterization laboratory, clinical orientation, monitoring skills, and basic life support. The student will perform and complete various competencies to prepare for the clinical experience in each rotation.

**Prerequisite:** None

**Corequisite:** CAVT 1020, CAVT 1080

#### **CAVT 1030 | ELECTROPHYSIOLOGY AND CARDIAC ANATOMY (15-60-3)**

This course introduces the concepts essential in the performance and interpretation of 12-lead EKG and heart sounds. As a study of the anatomy, physiology, structural relationships, and the pathophysiology of the human heart and vascular system, the course concentrates on specialized terminology, cardiac and vascular anatomy, and electrophysiology. Topics include: heart anatomy, circulatory system, heart electrical system, physical heart defects, electrocardiograph, preparation for various electrocardiographic examinations, physical principles and pathophysiology of heart sounds, exercise physiology, stress testing, Holter monitoring, cardiac pacemakers, and cardiac rehabilitation programs. Laboratory experience will be provided.

**Prerequisite:** Program Admission

#### **CAVT 1080 | ADVANCED HEMODYNAMICS AND CARDIAC PHYSIOLOGY (15-60-3)**

The student is introduced to various forms of invasive monitoring. Various forms of invasive access are studied, including right and left heart catheterization, arterial line setups, and appropriate care. Emphasis is placed on the basics of hemodynamic monitoring and interpretation. Also provides an overview of cardiovascular physiology and pathophysiology. Topics include: hemodynamics, aseptic technique, infection control, biochemistry of the cardiac muscle, conduction system, electrocardiogram, pathophysiology of acquired diseases, embryological development, and pathophysiology of congenital diseases.

**Prerequisite:** Program Admission

#### **CAVT 1090 | DRUG CALCULATIONS AND**

**ADMINISTRATION (15-30-2)**

This course uses basic mathematical concepts and includes basic drug administration and emphasizes critical thinking skills. Topics include: systems of measurement, calculating drug problems, resource materials usage, basic pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education.

**Prerequisites:** Program Admission

**CAVT 1100 | CARDIAC CATHETERIZATION FUNDAMENTALS (15-60-3)**

This course provides an overview of cardiovascular invasive diagnosis and therapy and includes an introduction of the cardiac catheterization lab. Topics include: ex-ray therapy, safety, positioning, coronary arteriography, pharmacology, invasive cardiac measurements and calculations, and specialty procedures.

**Prerequisite:** Program Admission

**CAVT 2020 | CARDIAC CATHETERIZATION II (15-90-4)**

An intensive study of the role of the CV Technologist in the various Cardiac Catheterization procedures such as: right and left heart catheterization, temporary pacemakers, Swan-Ganz, and coronary angioplasty. Topics include: general principles of acid-base and blood gas collection, interpretation and analogies, cardiac surgery and peripheral vascular disease, basic principles of electrophysiology and pacemaker technology, congenital heart disease and corrective surgeries, and basic hemodynamic review. Lab experience will be provided.

**Prerequisites:** CAVT 1020, CAVT 1021

**Corequisite:** CAVT 2030

**CAVT 2030 | CARDIAC CATHETERIZATION CLINICAL II (0-270-6)**

Provides hands-on experience in performing invasive cardiac catheterization procedures while being monitored by a registered preceptor. Topics include: policies and procedures class, ethical and legal behavior in the catheterization laboratory, scrubbing skills, monitoring skills, and advanced cardiac life support (ACLS) certification.

**Prerequisites:** CAVT 1020, CAVT 1021

**Corequisite:** CAVT 2020

**CAVT 2050 | CARDIAC CATHETERIZATION CLINICAL III (0-495-11)**

This course provides a culminating clinical experience which allows students to analyze information and procedural instruction provided throughout the program. Offers an intensive study of the hands-on experience in the role of the cardiac catheterization technologist in advanced cardiovascular procedures related to the catheterization lab while being monitored by a registered preceptor with emphasis on continuing to develop skills in scrubbing, monitoring and circulating during diagnostic and interventional procedures. Topics include: professional conduct, infection control, scrubbing skills, monitoring skills and circulation skills.

**Prerequisites:** CAVT 2020, CAVT 2030

**CAVT 2070 | CARDIAC CATHETERIZATION REGISTRY REVIEW I (0-60-2)**

This course is an intensive review to prepare the student for the national examination. Topics include: cardiovascular anatomy and physiology, cardiovascular disease and pathophysiology hemodynamic data, diagnostic techniques and patient care assessments.

**Prerequisites:** CAVT 1020, CAVT 1021, CAVT 2020, CAVT 2030

**Chemistry****CHEM 1211 | CHEMISTRY I (45-0-3)**

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.

**Prerequisite:** MATH 1101 or MATH 1103 or MATH 1111

**Corequisite:** CHEM 1211L

**CHEM 1211L | CHEMISTRY LAB I (0-45-1)**

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.

**Prerequisite:** MATH 1101 or MATH 1103 or MATH 1111

**Corequisite:** CHEM 1211

**CHEM 1212 | CHEMISTRY II (45-0-3)**

Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

**Prerequisite:** CHEM 1211, CHEM 1211L

**Corequisite:** CHEM 1212L

**CHEM 1212L | CHEMISTRY LAB II (0-45-1)**

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.

**Prerequisite:** CHEM 1211, CHEM 1211L

**Corequisite:** CHEM 1212

**Computer Information Systems****CIST 1001 | COMPUTER CONCEPTS (30-60-4)**

This course 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), and mobile computing.

**Prerequisite:** None

**CIST 1101 | WORKING WITH MICROSOFT WINDOWS (15-60-3)**

Working with Microsoft Windows provides students with the interface concepts of Microsoft Windows software and the opportunity to develop basic computer skills. Topics include: getting started with Microsoft Windows, managing programs and files with Microsoft Windows, using Microsoft Windows applications, data transfer with Microsoft Windows, printing with Microsoft Windows, and customizing with Microsoft Windows.



**Prerequisite:** None

### **CIST 1102 | KEYBOARDING (15-60-3)**

This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 20 gross words a minute (GMAW).

**Prerequisite:** None

### **CIST 1122 | HARDWARE INSTALLATION AND MAINTENANCE (30-75-4)**

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.

**Prerequisite:** Program Admission

### **CIST 1130 | OPERATING SYSTEMS CONCEPTS (15-60-3)**

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). 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.

**Prerequisite:** None

### **CIST 1141 | NETWORK + PREPARATION (30-60-4)**

To prepare students for the CompTIA Network+ certification examination. This course provides students 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.

**Prerequisites:** CIST 1122, CIST 1401

### **CIST 1180 | ADVANCED TOPICS IN OPERATING SYSTEMS (15-60-3)**

This course provides an in-depth study of operating system functions, utilities, and commands across multiple platforms. Topics include: Command Line interface (CLI), file systems and directory structures, boot sequence, temp files, swap files, page files, memory dumps, registry, .ini files, system configuration files, and the recycle bin.

**Prerequisite:** CIST 1130

### **CIST 1135 | OPERATING SYSTEMS AND VIRTUAL/ CLOUD COMPUTING (30-60-4)**

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.

**Prerequisites:** None

### **CIST 1200 | DATABASE MANAGEMENT (30-60-4)**

Provides an overview of the skills and knowledge of database application systems which are used in business government and industry. Topics include: history, database terminology and concepts, database system logical organization, data manipulation, database design concepts, models, normalization, Entity Relationship diagramming, physical database, networking and databases, and database security.

**Prerequisite:** None

### **CIST 1210 | INTRODUCTION TO ORACLE DATABASES (30-75-4)**

This course provides an introduction to the Oracle database management system platform and to Structured Query Language (SQL). Topics include database vocabulary, normalization, Oracle DML and DDL statements, SQL Statements, views and constraints.

**Prerequisite:** CIST 1001

### **CIST 1220 | STRUCTURED QUERY LANGUAGE (SQL) (30-60-4)**

This course includes basic database design concepts and solving database retrieval and modification problems using the SQL language. Topics include: database vocabulary, relational database design, data retrieval using SQL, data modification using SQL, developing and using SQL procedures.

**Prerequisite:** CIST 1305

### **CIST 1305 | PROGRAM DESIGN AND DEVELOPMENT (30-30-3)**

This is an introductory course which 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.

**Prerequisite:** None

### **CIST 1401 | COMPUTER NETWORKING FUNDAMENTALS (30-60-4)**

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.

**Prerequisite:** Program Admission

### **CIST 1510 | WEB DEVELOPMENT (30-30-3)**

Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and HTML 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.

**Prerequisite:** None

### **CIST 1520 | SCRIPTING TECHNOLOGIES (30-30-3)**

Students learn how to use the features and structure of a client side scripting language, explore the features on server side scripting and develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms.

**Prerequisite:** CIST 1510

### **CIST 1530 | WEB GRAPHICS (30-30-3)**

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.

**Prerequisite:** Program Admission

### **CIST 1540 | WEB ANIMATION (30-30-3)**

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.

**Prerequisite:** Program Admission

### **CIST 1601 | INFORMATION SECURITY FUNDAMENTALS (30-30-3)**

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Topics also include the legal, ethical, and professional issues in information security.

**Prerequisite:** None

### **CIST 1602 | SECURITY POLICIES AND PROCEDURES (45-0-3)**

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.

**Prerequisite:** None

### **CIST 2122 | A+ PREPARATION (15-60-3)**

This course serves to prepare students to complete the CompTIA A+ certification examination and provides 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.

**Prerequisite:** CIST 1122

### **CIST 2126 | COMPREHENSIVE PRESENTATION AND EMAIL (15-60-3)**

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.

**Prerequisite:** Program Admission

### **CIST 2127 | COMPREHENSIVE WORD PROCESSING (15-60-3)**

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.

**Prerequisite:** None

### **CIST 2128 | COMPREHENSIVE SPREADSHEET TECHNIQUES (15-60-3)**

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.

**Prerequisite:** None

### **CIST 2129 | COMPREHENSIVE DATABASE TECHNIQUES (15-90-4)**

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.

**Prerequisite:** None

### **CIST 2130 | DESKTOP SUPPORT CONCEPTS (15-60-3)**

This course is designed to give an overview to desktop support management.

**Prerequisite:** None

### **CIST 2212 | ORACLE DATABASE ADMINISTRATION I (30-60-4)**

This course enables the database student to implement and administer Oracle databases. Topics include: oracle logical architecture and administration tools, Oracle physical architecture and data dictionary views, performance monitoring and database security.

**Prerequisites:** CIST 1210, CIST 1220

### **CIST 2214 | ORACLE DATABASE ADMINISTRATION II (30-60-4)**

This course introduces participants to the critical task of planning and implementing database backup and recovery strategies. Topics include Backup and Recovery, Resource Management and Performance tuning, Globalization Support, and Diagnostic Tools.

**Prerequisite:** CIST 2212

### **CIST 2216 | ORACLE ADVANCED TOPICS (30-60-4)**

This course enables the database student to integrate database content and theory. The student will use Oracle

application development tools and utilities to create and manage realistic database development projects. Topics include SQL and PL/SQL, Oracle Forms, Database Reports and Integrated Database Applications.

Prerequisites: CIST 1210, CIST 1220

#### **CIST 2222 | ADMINISTERING MICROSOFT SQL SERVER (30-60-4)**

Provides instruction on how to administer a Microsoft SQL server. Topics include: planning, installation and configuration, configuring and managing security, managing and maintaining data, monitoring and optimization, and troubleshooting.

Prerequisites: CIST 1210, CIST 1220, CIST 2414

#### **CIST 2224 | DESIGNING AND IMPLEMENTING DATABASES WITH MICROSOFT SQL SERVER (30-60-4)**

Shows how to design and implement a database solution using Microsoft SQL Server. Topics include: developing logical data model and physical design, creating data services, creating physical database, and maintaining a database.

Prerequisite: CIST 1220

#### **CIST 2311 | VISUAL BASIC I (30-75-4)**

Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsoft's 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.

Prerequisite: CIST 1305

#### **CIST 2312 | VISUAL BASIC II (30-75-4)**

Visual Basic II teaches client-server systems, n-tier development environments, relational databases, use of SQL to access data, the use of ADO.NET objects, methods and properties to access and update relational and XML databases. Advanced features of Visual Basic are explored.

Prerequisites: CIST 1305, CIST 2311

#### **CIST 2313 | VISUAL BASIC III (30-75-4)**

This course provides a look at advanced Web Programming techniques using Microsoft Visual Basic. Topics include class and object creation, advanced data access, communicating with server side programs, security, and advanced topics.

Prerequisites: CIST 2311, CIST 2312

#### **CIST 2341 | C# PROGRAMMING I (30-75-4)**

This course is designed to teach the basic concepts and methods of object-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.

Prerequisite: CIST 1305

#### **CIST 2342 | C# PROGRAMMING II (30-75-4)**

This course is an intermediate course in C#.NET Programming. It is assumed that the student knows the C#.NET syntax as well as basic object oriented concepts. Intermediate C#.NET teaches client-server systems, n-tier development environments, relational databases, use of SQL to access data, the use of ADO.NET objects, methods and properties to access and update relational databases. Advanced features of C# windows programming are explored.

Prerequisite: CIST 2341

#### **CIST 2343 | C# PROGRAMMING III (30-75-4)**

This course is an advanced course in C#.NET programming. It is assumed that the student is fairly familiar with the C#.NET programming language. The goal of this course is to help students understand how to use C# to build industry level dynamic Web-based applications. The course covers in detail how to use C# to develop an Enterprise level Web Application. The students will learn how to use HTML to build the Client-Side, and how to use C# for the Server side processing of data and talking to databases.

Prerequisites: CIST 2342

#### **CIST 2351 | PHP PROGRAMMING I (30-75-4)**

An introductory PHP programming course that teaches students how to create dynamic websites. Topics include: PHP and basic web programming concepts, installing PHP, embedding PHP in HTML, variables and constants, operators, forms, conditional statements, looping, arrays, and text files.

Prerequisite: CIST 1305, CIST 1510

#### **CIST 2352 | PHP PROGRAMMING II**

Reinforces and extends the concepts learned in PHP Programming I. Topics include: Database retrieval and updating, multiple form handling, regular expressions, and advanced array processing.

Prerequisite: CIST 2351

#### **CIST 2361 | C++ PROGRAMMING I (30-75-4)**

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.

Prerequisite: CIST 1305

#### **CIST 2362 | C++ PROGRAMMING II (30-75-4)**

Develops skills for the programmer to write programs using the language of C++. Emphasis is placed on utilizing the added features of C++, which will be added to the skills mastered in Introduction to C++ Programming. Topics include: objects, classes, inheritance, overloading, polymorphism, streams, containers, and exceptions.

Prerequisite: CIST 2361

#### **CIST 2371 | JAVA PROGRAMMING I (30-75-4)**

This course is designed to teach the basic concepts and methods of object-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.

**Prerequisite:** CIST 1305

#### **CIST 2372 | JAVA PROGRAMMING II (30-75-4)**

This course is an intermediate course in Java Programming. It is assumed that the student knows the Java syntax as well as basic object oriented concepts. The student will use classes and objects provided by the core Java API. They will use these classes to accomplish tasks such as Database access, File access, exception handling, running threads, using sockets to talk across a network, and remotely calling methods using RMI techniques.

**Prerequisite:** CIST 2371

#### **CIST 2373 | JAVA PROGRAMMING III (30-75-4)**

This course is a course in building Web Applications using Java Enterprise Edition (JEE). It is assumed that the student knows Java Standard Edition as the concepts and techniques build on that foundation. The student will install Web, Application and Database servers. The student will learn to build Web Applications using JEE technologies, such as Servlets, Java Server Pages and Enterprise JavaBeans.

**Prerequisite:** CIST 2372

#### **CIST 2381 | MOBILE APPLICATION DEVELOPMENT (30-60-4)**

This course explores mobile guidelines, standards, and techniques. This course includes design and development techniques for multiple mobile devices, platforms, and operating systems. Students will develop mobile applications using state of practice development tools, languages and devices.

**Prerequisite:** CIST 1305

#### **CIST 2411 | MICROSOFT CLIENT (30-60-4)**

Provides the ability to implement, administrate, and troubleshoot Windows Professional Client as a desktop operating system in any network environment.

**Prerequisite:** Program Admission

#### **CIST 2412 | Microsoft Server Directory Services (30-60-4)**

Provides students with knowledge and skills necessary to install, configure, manage, support and administer Microsoft Directory Services.

**Prerequisite:** Program Admission

#### **CIST 2413 | MICROSOFT SERVER INFRASTRUCTURE (30-60-4)**

Provides students with knowledge and skills necessary to install, configure, manage, support and administer a Microsoft network infrastructure.

**Prerequisite:** Program Admission

#### **CIST 2414 | MICROSOFT SERVER ADMINISTRATOR (30-60-4)**

Provides students with knowledge and skills necessary to install, configure, manage, support and administer Windows Server. Topics include server deployment, server management, monitor and maintain servers, application and data provisioning, and business continuity and high availability.

**Prerequisite:** Program Admission

#### **CIST 2420 | MICROSOFT EXCHANGE SERVER (30-60-4)**

Provides students with the knowledge and skills necessary to install, configure, manage, support and administer Microsoft Exchange Server.

**Prerequisites:** CIST 2413, CIST 2414

#### **CIST 2431 | UNIX/LINUX INTRODUCTION (30-60-4)**

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, linking files, wildcards, determining present working directory and changing directory locations.

**Prerequisite:** Program Admission

#### **CIST 2432 | UNIX/LINUX SERVER (30-60-4)**

This course covers UNIX/Linux operating system administration skills necessary to perform administrative functions. Topics include: installing UNIX/Linux, configuring and building a custom kernel, adding and removing software packages, managing run levels, managing users and groups, implementing security permissions, introduction to shell programming, managing and fixing the file system, managing memory and swap space, managing and scheduling jobs, managing system logs, understanding the boot process, system configuration files, file backup and restore, file compression, fault tolerance, and printing.

**Prerequisite:** Program Admission

#### **CIST 2433 | UNIX/LINUX ADVANCED SERVER (30-60-4)**

This course covers UNIX/Linux operating system advanced administration skills necessary to perform advanced administrative functions. Topics include: understanding UNIX/Linux networking, managing network printing, configuring and troubleshooting TCP/IP on UNIX/Linux, configuring DHCP, DNS, a Web server, an FTP server, an E-mail server, and understanding NIS (yp) and NFS. Also, includes the following: understanding advanced security issues such as firewalls and NAT, using network commands, use of graphical system such as X Windows, sharing files and printers, and advanced shell programming.

**Prerequisite:** CIST 2432

#### **CIST 2434 | UNIX/LINUX SCRIPTING (30-60-4)**

Course covers UNIX/Linux shell programming techniques necessary for UNIX/Linux System Administrators to understand and create shell script programs in a UNIX/Linux environment. Topics include: shell variables, running shell script program, conditional processing, looping structures, arithmetic operators, logical operators such as AND, OR, and NOT, positional parameters and process variables, redirection, piping and standard error, use of backslash, quotes and back quotes.

**Prerequisite:** CIST 2431

#### **CIST 2441 | CISCO NETWORKING FOR HOME AND SMALL BUSINESSES (30-60-4)**

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.

**Prerequisite:** Program Admission

#### **CIST 2442 | CISCO WORKING AT A SMALL-TO-MEDIUM BUSINESS OR ISP (30-60-4)**

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.

**Prerequisite:** CIST 2441

#### **CIST 2443 | CISCO ROUTING AND SWITCHING (30-60-4)**

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.

**Prerequisite:** CIST 2441

#### **CIST 2444 | CISCO DESIGNING AND SUPPORTING COMPUTER NETWORKS (30-60-4)**

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.

**Prerequisites:** CIST 2442, CIST 2443

#### **CIST 2451 | INTRODUCTION TO NETWORKS - CISCO (30-60-4)**

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.

**Prerequisite:** Program Admission

#### **CIST 2452 | CISCO ROUTING AND SWITCHING ESSENTIALS(30-60-4)**

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.

**Prerequisite:** CIST 2451

#### **CIST 2453 | CISCO SCALING NETWORKS (30-60-4)**

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.

**Prerequisite:** CIST 2451

#### **CIST 2454 | CISCO CONNECTING NETWORKS (30-60-4)**

This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include: introduction to WANs, WAN protocols, basic network security and ACLs, remote access, IP addressing services, and network troubleshooting.

**Prerequisites:** CIST 2452, CIST 2453

#### **CIST 2455 | CISCO CCNA SECURITY (30-60-4)**

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.

**Prerequisite:** CIST 2444 or CIST 2454

#### **CIST 2471 | CCNP ROUTE: IMPLEMENTING IP ROUTING (30-60-4)**

Teaches students how to implement, monitor, and maintain routing services in an enterprise network. The course covers how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4/IPv6 environments. The course includes configuration of secure routing solutions. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

**Prerequisite:** CIST 2454 or CIST 2444 or CCNA Certification

#### **CIST 2472 | CCNP SWITCH: IMPLEMENTING IP SWITCHING (30-60-4)**

Teaches students how to implement, monitor, and maintain switching in converged enterprise campus networks. The course covers how to plan, configure, and verify the implementation of complex enterprise switching solutions. The course also covers the secure integration of VLANs, WLANs, voice and video into campus networks. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

**Prerequisite:** CIST 2454 or CIST 2444 or CCNA Certification

#### **CIST 2473 | CCNP TSHOOT: MAINTAINING AND TROUBLESHOOTING IP NETWORKS (30-60-4)**

Teaches students how to monitor and maintain complex enterprise routed and switched IP networks. Skills learned include the planning and execution of regular network maintenance as well as support and troubleshooting using technology-based process and best practices based on systematic and industry recognized approaches. Extensive labs emphasize hands-on learning and practice to reinforce troubleshooting techniques.

**Prerequisite:** CIST 2471 or CIST 2472

**CIST 2510 | WEB TECHNOLOGIES (30-30-3)**

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.

**Prerequisite:** Program Admission, CIST 1510

**CIST 2531 | WEB GRAPHICS II (30-30-3)**

Students will further explore how to use an industry standard or open source graphics software program 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.

**Prerequisite:** CIST 1530

**CIST 2541 | WEB ANIMATION II (30-30-3)**

In this continuation of Web Animation I, students build on their basic scripting knowledge to incorporate advanced scripting techniques in an animated project. They will also explore how to create realistic graphics using inverse kinematics, how to create and edit advanced tweens and how to incorporate various media types into a Web based animation or movie. The course concludes with the completion of a Web animation project.

**Prerequisite:** CIST 1540

**CIST 2550 | WEB DEVELOPMENT II (30-30-3)**

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.

**Prerequisites:** CIST 1220, CIST 1510, CIST 1520

**CIST 2560 | WEB APPLICATION PROGRAMMING I**

Explores W3C and Microsoft .NET programming standards in order to practice various web programming techniques for creating web forms, providing web navigation, and accessing data that produce dynamic interactive web applications. Students may use Microsoft Visual Basic .NET, Microsoft C# .NET, or another .NET language.

**Prerequisite:** CIST 1305

**CIST 2561 | WEB APPLICATION PROGRAMMING II (30-60-4)**

This course is a continuation of CIST 2560 Web Application Programming I. The student will explore advanced web programming concepts and technologies which include data binding, program security, program user validation, caching, widgets, AJAX, and social engineering. The student will follow W3C programming standards and .NET programming standards to produce dynamic interactive secure web applications. Students may use Microsoft Visual Basic .NET, Microsoft C# .NET, or another .NET language.

**Prerequisite:** CIST 2560

**CIST 2570 | OPEN SOURCE WEB APPLICATION PROGRAMMING I**

Explores open source W3C programming standards in order to practice various web programming techniques for creating web forms, providing web navigation, and accessing data that produce dynamic interactive web applications. Students may use Java, Perl, PHP, Python, or other open source web programming languages.

**Prerequisite:** CIST 1305

**CIST 2571 | OPEN SOURCE WEB APPLICATION PROGRAMMING II (30-60-4)**

This course is a continuation of CIST 2570 Open Source Web Application Programming I. The student will explore advanced web programming concepts and technologies which include data binding, program security, program user validation, caching, widgets, AJAX, and social engineering. The student will follow W3C programming standards to produce dynamic interactive secure web applications. Students may use PERL, PHP, Java, Python, or another open source language.

**Prerequisite:** CIST 2570

**CIST 2580 | INTERACTIVE AND SOCIAL APPS INTEGRATION (42-38-4)**

Explores social and interactive web application technology and its effect on the business model. Topics include interactive and social web business model, interactive and social business web requirements and successful interactive and social integration.

**Prerequisite:** CIST 1305

**CIST 2601 | IMPLEMENTING OPERATING SYSTEMS SECURITY (30-60-4)**

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.

**Prerequisites:** CIST 1401 or CIST 2451 or CIST 2441; CIST 1601

**CIST 2602 | NETWORK SECURITY (30-60-4)**

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.

**Prerequisites:** CIST 1401 or CIST 2451 or CIST 2441

**CIST 2611 | IMPLEMENTING INTERNET/INTRANET FIREWALLS (30-60-4)**

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.

**Prerequisites:** CIST 1401 or CIST 2451 or CIST 2441

**CIST 2612 | COMPUTER FORENSICS (30-60-4)**

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.

**Prerequisites:** CIST 1122, CIST 1601

**CIST 2630 | COMPUTER FORENSICS & DATA IDENTIFICATION (15-60-3)**

Provides a study of computer forensic techniques that will teach the techniques needed to harvest, identify, and analyze data while maintaining the legal and ethical standards needed to produce evidence that is admissible in court. Topics include: Computer Forensics, Ethical practices, Sterile Media, Computer Forensic Tools, Evidence Collection, Evidence Analysis, and Documentation.

**Prerequisites:** CIST 1122, CIST 1130, CIST 1180

**CIST 2631 | CYBER CRIME TECHNOLOGY (15-60-3)**

This course prepares the student to search and investigate web based criminal activity into a computer system or a network. Identify, separate, and investigate web files and data that are suspicious. Through utilization of forensic tools, track route of travel, sender, and destination of suspected files and data. Harvest data from web browsers and email clients. Harvest data from cell phones and PDAs. Prepare suspected files and data for presentation at a legal proceeding.

**Prerequisites:** CIST 1130, CIST 2630

**CIST 2632 | COMPUTER FORENSICS PROJECT (15-60-3)**

This is a capstone course project providing a realistic experience for students working in an environment to locate evidence of a crime within a computer system and prepare it for presentation at a trial or legal proceeding. Topics include: search warrants and chain/control of evidence, operating system tools and techniques, data recovery and safeguard, and presentation for trial/legal proceeding.

**Prerequisite:** CIST 1180

**CIST 2921 | IT ANALYSIS, DESIGN, AND PROJECT MANAGEMENT (30-75-4)**

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.

**Prerequisite:** None

**CIST 2950 | WEB SYSTEMS PROJECT (15-60-3)**

This course is a capstone course providing a realistic experience for students working in a team to develop a complete web systems project.

**Prerequisite:** Advisor Approval

**CIST 2991 | CIST INTERNSHIP I (0-135-3)**

This course 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.

**Prerequisite:** Advisor Approval

**Clinical Laboratory Technology****CLBT 1010 | INTRODUCTION TO CLINICAL LABORATORY TECHNOLOGY (15-45-2)**

This course introduces students to the terms, concepts, procedures, and equipment used in a professional clinical laboratory. Topics include: professional ethics and regulatory agencies; laboratory safety, equipment, and techniques; phlebotomy/specimen processing; related lab math, quality control concepts; process improvement; documentation

and computer usage; and point of care testing. Practical experience in phlebotomy will be provided in the institution laboratory and/or the clinical setting.

**Prerequisite:** Program Admission

**CLBT 1030 | URINALYSIS/BODY FLUIDS (15-45-2)**

This course provides theory and techniques required to conduct tests on urine and various body fluids. Theory and tests are related to disease states and diagnosis. Topics include: fundamental theory of urinalysis; basic urinalysis tests; correlation of urinalysis to disease states; related lab math; body fluid tests; special urinalysis and related testing; and safety and quality control.

**Prerequisites:** BIOL 2113, BIOL 2113L, CLBT 1010

**CLBT 1040 | HEMATOLOGY/COAGULATION (45-90-5)**

This course introduces the fundamental formation, function, and degradation of blood cells. Topics include: reticuloendothelial system and blood cell formation, complete blood count and differential, other related blood test, related lab math, correlation of test results to disease states, coagulation and fibrinolysis, instrumentation for hematology and coagulation, critical values and blood cell dyscrasias, safety and quality control, and process improvement.

**Prerequisite:** BIOL 2113, BIOL 2113L, CLBT 1010, ALHS 1090

**CLBT 1050 | SEROLOGY/IMMUNOLOGY (30-45-3)**

This course introduces the fundamental theory and techniques applicable to serology and immunology practice in the medical laboratory. Topics include: immune system, antigen and antibody reactions, immunological diseases, related lab math, common serological techniques, safety and quality control, and process improvement.

**Prerequisite:** CLBT 1010

**CLBT 1060 | IMMUNOHEMATOLOGY (30-90-4)**

This course provides an in-depth study of immunohematology principles and practices as applicable to medical laboratory technology. Topics include: genetic theory and clinical applications, immunology, donor unit collection, related lab math, pre-transfusion testing, management of disease states and transfusion reactions, safety and quality control, and process improvement.

**Prerequisite:** CLBT 1050

**CLBT 1070 | CLINICAL CHEMISTRY (30-90-4)**

This course develops concepts and techniques of clinical chemistry applicable to medical laboratory technology. Topics include: carbohydrates, electrolytes and acid-base balance, nitrogenous compounds, related lab math, enzymes and endocrinology, liver functions, lipids, toxicology and therapeutic drug monitoring, safety and quality control, correlation of disease states, process improvement (team approach), and critical thinking skills.

**Prerequisites:** BIOL 2114, BIOL 2114L, CLBT 1010, CHEM 1212, CHEM 1212L

**CLBT 1080 | MICROBIOLOGY (60-90-5)**

This course introduces fundamental microbiology and parasitology theory and techniques applicable to disease state identification. Topics include: microbiology fundamentals; basic techniques; clinical microbiology; related lab math; anti-microbial sensitivity; safety and quality control; parasitology; mycology, mycobacteriology, and virology; correlation of disease states; and process improvement.

**Prerequisite:** CLBT 1010

**CLBT 2090 | CLINICAL URINALYSIS, SEROLOGY, AND PREANALYTIC SPECIMEN PROCESS PRACTICUM (0-135-3)**

This course provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: urinalysis tests, serological tests and techniques, blood and specimen processing, correlation of test results to disease states, safety and quality control, and quality assurance. The clinical practicum is implemented through the use of written training plans, written performance evaluation, and coordinated supervision.

**Prerequisites:** CLBT 1010, CLBT 1030, CLBT 1050

**CLBT 2100 | CLINICAL IMMUNOHEMATOLOGY PRACTICUM (0-180-4)**

This course provides students with an opportunity for in-depth application and reinforcement of immunohematology principles and techniques in a medical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: specimen processing; slide and tube immunological techniques; criteria for special techniques; component and therapy practices; management of disease states; transfusion complications; safety; documentation/quality control; and process improvement. The clinical practicum is implemented through the use of written training plans, written performance evaluation, and coordinated supervision.

**Prerequisite:** CLBT 1060

**CLBT 2110 | CLINICAL HEMATOLOGY/COAGULATION PRACTICUM (0-180-4)**

This course provides students with an opportunity for in-depth application and reinforcement of hematology/coagulation principles and techniques in a medical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: complete blood count and differentials; other related blood tests; coagulation and fibrinolysis tests; correlation of test results to disease states and critical values; instrumentation; safety; documentation/quality control; and process improvement. The clinical practicum is implemented through the use of written training plans, written performance evaluation, and coordinated supervision.

**Prerequisite:** CLBT 1040

**CLBT 2120 | CLINICAL MICROBIOLOGY PRACTICUM (0-180-4)**

This course provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: specimen inoculations; stains; culture work-ups; bacterial identification; anti-microbial sensitivity; media preparation; safety; documentation/quality control; and process improvement. The clinical practicum is implemented through the use of written training plans, written performance evaluation, and coordinated supervision.

**Prerequisite:** CLBT 1080

**CLBT 2130 | CLINICAL CHEMISTRY PRACTICUM (0-180-4)**

This course provides students with an opportunity for in-depth application and reinforcement of chemistry principles and techniques in a medical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: therapeutic drugs and toxicology; automated and manual chemistry; immune-chemistry; special chemistry; safety; correlation of test results to disease states and critical values; instrumentation; documentation/quality control; and process improvement. The clinical practicum is implemented through the use of written training plans, written performance evaluation, and coordinated supervision.

**Prerequisite:** CLBT 1070

**CLBT 2200 | CLT CERTIFICATION REVIEW (0-60-2)**

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for the medical laboratory technician level. Topics include review of: professional ethics, regulatory agencies, safety, and fundamental techniques; phlebotomy and specimen collection and processing; quality control concepts; computer applications; urinalysis and body fluids; hematology and coagulation; immunology and serology; immunohematology; clinical chemistry in solutions; microbiology; parasitology, mycology, mycobacteriology, and virology; and test taking skills.

**Prerequisites:** CLBT 1030, CLBT 1040, CLBT 1050, CLBT 1060, CLBT 1070, CLBT 1080

**Construction Management****CMTT 2010 | RESIDENTIAL ESTIMATING REVIEW (45-0-3)**

This course introduces the complete estimating process from excavation to completed residence. Topics include the sequencing of construction, materials calculation, blueprint interpretation methods of construction, working with subcontractors, and final estimate assembly.

**Prerequisite:** None

**CMTT 2020 | CONSTRUCTION DRAFTING I (15-60-3)**

This course provides instruction in producing residential floor plans and elevations using computer-aided drafting and design (CAD) software. Topics include system setup and system management, software menus and basic functions, prototype drawings, and two and three dimensional drafting and dimensioning.

**Prerequisite:** None

**CMTT 2050 | RESIDENTIAL CODE REVIEW (30-30-3)**

This course covers building codes as they apply to typical residential applications. Topics include international residential codes, working with building inspectors, permits and inspections, and site visits.

**Prerequisite:** None

**CMTT 2130 | COMPUTERIZED CONSTRUCTION SCHEDULING (30-30-3)**

This course provides instruction in the use of application software for scheduling construction work. The use of contemporary construction scheduling and management software is emphasized. Topics include software overview, scheduling methods and requirements, and computerized scheduling of a simulated construction job.

**Prerequisite:** None



**CMTT 2170 | CONSTRUCTION CONTRACTING (45-0-3)**

This course provides an in depth study of the contractual relationship between the parties involved in building construction contracting. Topics include bonds, insurance, bidding, awarding, and subcontracting types and conditions.

**Prerequisite:** None

**Construction Fundamentals Core****COFC 1011 | OVERVIEW OF BUILDING CONSTRUCTION PRACTICES AND MATERIALS (30-30-3)**

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.

**Prerequisite:** None

**COFC 1020 | PROFESSIONAL TOOL USE AND SAFETY (15-60-3)**

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.

**Prerequisite:** None

**COFC 1030 | MATERIALS AND FASTENERS (30-0-2)**

This course introduces the fundamental array of building materials used in residential and commercial construction. Topics include fasteners, wood products, concrete, brick and block, plumbing materials, finishing materials, manufactured products and an introduction to construction cost estimation.

**Prerequisite:** None

**COFC 1050 | CONSTRUCTION PRINT READING FUNDAMENTALS (45-0-3)**

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.

**Prerequisite:** None

**COFC 1080 | CONSTRUCTION TRADES CORE (45-45-4)**

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.

**Prerequisites:** None

**College Life****COLL 1500 | STUDENT SUCCESS (45-0-3)**

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, Career Exploration, Research Skills, College Campus Knowledge, Memory and Reading Skills, Presentation and Interview Skills, and Group Skills.

**Prerequisite:** None

**Introduction to Computer Literacy****COMP 1000 | INTRODUCTION TO COMPUTER LITERACY (25-40-3)**

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. When advisors determine remediation is appropriate, students are advised to take CIST 1101, Working With Microsoft Windows, before attempting COMP 1000.

**Prerequisite:** None

**Cosmetology****COSM 1000 | INTRODUCTION TO COSMETOLOGY THEORY (60-0-4)**

Introduces fundamental theory and practices in 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.

**Prerequisite:** Program admission

**COSM 1010 | CHEMICAL TEXTURE SERVICES (15-75-3)**

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.

**Prerequisite:** None

**Corequisite:** COSM 1000

**COSM 1020 | HAIR CARE AND TREATMENT (15-60-3)**

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.

**Prerequisite:** None

**Corequisite:** COSM 1000

**COSM 1030 | HAIRCUTTING (15-90-3)**

**Prerequisite:** None

**Corequisite:** COSM 1000

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.

**COSM 1040 | STYLING (15-75-3)**

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.

**Prerequisite:** None  
**Corequisite:** COSM 1000

### **COSM 1050 | HAIR COLOR (15-75-3)**

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.

**Prerequisite:** None  
**Corequisite:** COSM 1000

### **COSM 1060 | FUNDAMENTALS OF SKIN CARE (15-90-3)**

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.

**Prerequisite:** None  
**Corequisite:** COSM 1000

### **COSM 1070 | NAIL CARE AND ADVANCED TECHNIQUES (15-90-3)**

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).

**Prerequisite:** None  
**Corequisite:** COSM 1000

### **COSM 1080 | PHYSICAL HAIR SERVICES PRACTICUM (15-90-3)**

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: scalp, and hair treatments; haircutting; styling; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

**Prerequisites:** COSM 1000, COSM 1020, COSM 1030, COSM 1040

### **COSM 1090 | HAIR SERVICES PRACTICUM I (15-90-3)**

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, hair and scalp treatments; haircutting; clipper design, precision cutting, styling; dispensary; 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.

**Prerequisite:** COSM 1000, COSM 1010, COSM 1020, COSM 1030, COSM 1040, COSM 1050

### **COSM 1100 | HAIR SERVICES PRACTICUM II (15-90-3)**

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; hair color and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

**Prerequisite:** None  
**Corequisite:** COSM 1090

### **COSM 1110 | HAIR SERVICES PRACTICUM III (15-90-3)**

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; scalp, and hair treatments; haircutting; dispensary; styling; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

**Prerequisite:** None  
**Corequisite:** COSM 1100

### **COSM 1115 | HAIR SERVICES PRACTICUM IV (0-90-2)**

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.

**Prerequisite:** None  
**Corequisite:** COSM 1110

### **COSM 1120 | SALON MANAGEMENT (45-0-3)**

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.

**Prerequisite:** None  
**Corequisite:** COSM 1000

### **COSM 1125 | SKIN AND NAIL CARE PRACTICUM (0-90-2)**

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.

**Prerequisite:** None

**Corequisite:** COSM 1060, COSM 1070

### **COSM 2000 | INSTRUCTIONAL THEORY AND DOCUMENTATION (30-60-4)**

Introduces the fundamental theory and practices of the cosmetology instructor profession. Emphasis will be placed on fostering and providing educational training in the field of Cosmetology. Topics include: state and local laws, rules and regulations, professional image, effective communication, theory of instruction, Hazardous Duty Standards Act Compliance, career opportunities, documentation for attendance, grades, student service and theory hours, basic record keeping, and effective use of an advisory committee.

**Prerequisite:** Program Admission

### **COSM 2010 | SALON MANAGEMENT (15-75-3)**

Emphasizes the steps involved in the operation of a cosmetology program. Topics include: entry-level skills, communication skills, inventory, networking, and portfolio design.

**Prerequisite:** None

**Corequisite:** COSM 2000

### **COSM 2020 | PRINCIPLES OF TEACHING (15-75-3)**

Provides knowledge and application on the principles of teaching. Topics include: educator to learner relationships, communication skills, emotional influences, needs of today's learner, destructive versus constructive tactics, learner motivation, and cultivating positive relationships.

**Prerequisite:** None

**Corequisite:** COSM 2000

### **COSM 2030 | LESSON PLANS (15-75-3)**

Emphasizes the steps in involved in the development of a lesson plan. Topics include: development of curriculum, instructional outcomes, components of a lesson plan, using visual aids, print materials and audio visuals in a lesson plan.

**Prerequisite:** None

**Corequisite:** COSM 2000

### **COSM 2040 | CLASSROOM MANAGEMENT (15-75-3)**

Emphasis will be placed on classroom management, professionalism in the classroom and dynamic clinic teaching. Topics include: classroom management, managing learner behavior, managing difficult learners, classroom arrangements, clinic environment, and academic advising and counseling.

**Prerequisite:** None

**Corequisite:** COSM 2000

### **COSM 2050 | INSTRUCTION AND EVALUATION (0-90-2)**

Identify the characteristics of the different learner types, teaching methods, and measuring student learning outcomes. Topics include: challenges for all learner styles, lecturing, preparing for a lecture method of teaching, testing, academic policy, rubrics, special learner needs, and multiple-category grading system.

**Prerequisite:** None

**Corequisite:** COSM 2000

### **COSM 2060 | PRACTICUM I (0-135-3)**

Provides experience necessary for professional development and completion of requirements for Instructor training state licensure. Emphasis will be placed on the student's display of professional conduct, positive attitude, and evaluation of learners in a classroom/lab setting. The requirements for this course may be met in a classroom/laboratory setting. Topics include monitoring and evaluating in the following areas: theory/online testing; permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance.

**Prerequisites:** COSM 2000, COSM 2010, COSM 2020, COSM 2030, COSM 2040, COSM 2050

### **COSM 2070 | PRACTICUM II (0-135-3)**

Provides experience necessary for professional development and completion of requirements for instructor training state licensure requirements. Emphasis will be placed on the student's display of professional conduct, positive attitude, and evaluation of learners in a lab setting. The requirements for this course may be met in a classroom/laboratory setting. Topics include monitoring and evaluating in the following areas: permanent waving and relaxers; hair color and lightening; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance.

**Prerequisite:** None

**Corequisite:** COSM 2060

## **Criminal Justice**

### **CRJU 1010 | INTRODUCTION TO CRIMINAL JUSTICE (45-0-3)**

This course 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.

**Prerequisite:** None

### **CRJU 1030 | CORRECTIONS (45-0-3)**

This course 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.

**Prerequisite:** Program Admission

### **CRJU 1040 | PRINCIPLES OF LAW ENFORCEMENT (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1043 | PROBATION AND PAROLE (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1052 | CRIMINAL JUSTICE ADMINISTRATION (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1062 | METHODS OF CRIMINAL INVESTIGATION (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1063 | CRIME SCENE PROCESSING (15-60-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1065 | COMMUNITY-ORIENTED POLICING (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1068 | CRIMINAL LAW FOR CRIMINAL JUSTICE (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1075 | REPORT WRITING (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 1400 | ETHICS AND CULTURAL PERSPECTIVES FOR CRIMINAL JUSTICE (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 2020 | CONSTITUTIONAL LAW FOR CRIMINAL JUSTICE (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 2050 | CRIMINAL PROCEDURE (45-0-3)**

Introduces the procedural law of the criminal justice system which governs the series of proceedings through which government enforces substantive criminal law. The course offers an emphasis on the laws of arrest and search and seizure; the rules of evidence, right to counsel, and the rights and duties of both citizens and officers. The course covers in depth appropriate Case Law and court rulings that dictate criminal procedure on the State and Federal Level.

**Prerequisite:** Program Admission

### **CRJU 2060 | CRIMINOLOGY (45-0-3)**

This course 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.

**Prerequisite:** Program Admission

### **CRJU 2070 | JUVENILE JUSTICE (45-0-3)**

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.

**Prerequisite:** Program Admission

### **CRJU 2090 | CRIMINAL JUSTICE PRACTICUM (0-135-3)**

This course 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.

**Prerequisite:** Advisor Approval

### **CRJU 2201 | CRIMINAL COURTS (45-0-3)**

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.

**Prerequisite:** Program Admission

## **Central Sterile Supply Processing**

### **CSSP 1010 | CENTRAL STERILE SUPPLY PROCESSING TECHNICIAN (45-60-5)**

This course provides an overview of the Central Sterile Processing and Distribution profession and develops the fundamental concepts and principles necessary to successfully participate as an entry level Central Sterile Processing Technician. Emphasis will be placed on the profession of Central Sterile Processing, basic sciences and related subjects, infection control, aseptic technique, equipment management, sterilization, instrumentation and supplies, legal issues, inventory management, safety, quality assurance, professional development and healthcare trends. Students receive training to function as entry-level employees and receive 32 to 40 hours of clinical hours toward the 400 hours required to be eligible to sit for the International Association of Healthcare Central Service Material Management certification exam.

**Prerequisite:** Program admission

### **CSSP 1020 | CENTRAL STERILE SUPPLY PROCESSING TECHNICIAN PRACTICUM I (0-270-6)**

This course complements CSSP 1010 Central Sterile Supply Processing Technician, providing the practicum hours necessary to meet the International Association of Healthcare Central Service Materiel Management (IAHCSMM) requirements to sit for the certification examination.

**Prerequisite:** Program admission

### **CSSP 1022 | CENTRAL STERILE SUPPLY PROCESSING TECHNICIAN PRACTICUM II (0-225-5)**

This course complements CSSP 1010 Central Sterile Supply Processing Technician, and together with CSSP 1020 provides the practical hours necessary to meet the International Association of Healthcare Central Service Materiel Management (IAHCSMM) requirements to sit for the certification examination.

**Prerequisite:** Program admission

## **Commercial Truck Driving**

### **CTDL 1010 | FUNDAMENTALS OF COMMERCIAL DRIVING (45-0-3)**

This course 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.

**Prerequisite:** None

### **CTDL 1020 | COMBINATION VEHICLE BASIC OPERATION AND RANGE WORK (15-35-2)**

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 receive 12 hours behind the wheel (BTW) instructional time in range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

**Corequisite:** CTDL1010

### **CTDL 1030 | COMBINATION VEHICLE ADVANCED OPERATIONS (20-105-4)**

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 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) of range and street/road driving. Note: state law requires that whenever a combination vehicle is operated on public roads an instructor must be present in the vehicle while the student is driving.

**Corequisite:** CTDL1020

### **CTDL 1050 | STRAIGHT TRUCK/PASSENGER VEHICLE BASIC OPERATIONS (15-35-2)**

This course focuses on familiarizing 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 receive at least twelve (12) hours behind-the-wheel (BTW) instructional time in range operations b operating a straight truck or passenger vehicle through clearance maneuvers, backing, turning, parallel parking and coupling and uncoupling.

**Corequisite:** CTDL 1010

### **CTDL 1060 | STRAIGHT TRUCK/PASSENGER VEHICLE ADVANCED OPERATIONS (20-105-4)**

Advanced operations focuses on developing students' driving skills under actual road conditions. The classroom part of the course stresses safe operating practices. These safe operating practices are then integrated into the development of driving skills on the road. 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 DENA 1050) of 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.

**Corequisite:** DENA 1050

## **Culinary Nutrition**

### **CUUL 1000 FUNDAMENTALS OF CULINARY ARTS (45-30-4)**

This course provides an overview of the professionalism in culinary arts, culinary opportunities, chef history, pride, and esprit de corps. Introduces principles and practices for 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 and distribution. Laboratory demonstration and student experimentation parallel class work.

### **CUUL 1110 CULINARY SAFETY AND SANITATION (15-30-2)**

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.

### **CUUL 1120 PRINCIPLES OF COOKING (30-150-6)**

Co-requisite: CUUL 1110

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.

### **CUUL 1122 FOUNDATIONS OF COOKING PRINCIPLES (15-75-3)**

Co-requisites: CUUL 1000, CUUL 1110

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, introduction to basic production mise-en place, classical knife cuts, basic stock preparation methods, mother sauce techniques and preparations, small sauces and derivatives from mother sauce, basic thickening agents, classical soup preparation methods, introduction methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

### **CUUL 1124 FOUNDATIONS OF COOKING TECHNIQUES (15-75-3)**

Co-requisites: CUUL 1000, CUUL 1110, CUUL 1122

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, methods of food preparations, classical knife cuts, kitchen aromatics, regional cuisine history, and introduction to safe food preparations, recipe utilization, and nutrition. Laboratory demonstrations student experimentation and parallels class work. Course Capstone is based on The American Culinary Federations Certification: Certified Culinarian written and practical exams.

### **CUUL 1129 FUNDAMENTALS OF RESTAURANT OPERATIONS (30-75-4)**

Prerequisite: CUUL 1120

Introduces the fundamentals of dining and beverage service and experience in preparation of a wide variety of quantity foods. Course content reflect American Culinary Federation Education Institute apprenticeship training objectives. Topics include dining service/guest service, dining service positions and functions, international dining services, restaurant business laws, preparation and setup, table side service, and beverage service and setup, kitchen operational procedures, equipment use, banquet planning, recipe conversion, food decorating, safety and sanitation, and production of quantity food. Laboratory practice parallels class work.

### **CUUL 1170 INTRODUCTION TO CULINARY NUTRITION (45-0-3)**

Prerequisite: Program Admission

This course is an orientation for school nutrition employees that will introduce students to proper sanitation and food handling, equipment safety, first aid, meal pattern requirements, quantity food production, merchandising, communication, and basic nutrition knowledge. The course will help school nutrition employees develop skills that will result in improved nutrition programs and service to customers. Basic nutrition concepts will focus on Iron, Fats, Saturated Fat, and Cholesterol, Protein, Fiber, Sugar, Sodium, Calories, Calcium, Vitamin A and Vitamin C.

### **CUUL 1370 CULINARY NUTRITION AN MENU DEVELOPMENT (15-75-3)**

Prerequisite: CUUL 1120

This course emphasizes menu planning for all types of facilities, services, and special diets. Topics include: menu selection, menu development and pricing, nutritional foods, and organics. Laboratory demonstrations, student management and supervision parallel class work.

## **Dental Assisting**

### **DENA 1010 | BASIC HUMAN BIOLOGY (15-0-1)**

This course focuses on basic normal structure and function of the human body with an emphasis on organ systems. Topics include medical terminology as it relates to the normal human body; normal structure and function of the human body focusing on cells and tissues, organs and systems, and homeostatic mechanisms.

**Prerequisite:** Program Admission

### **DENA 1030 | PREVENTIVE DENTISTRY (15-30-2)**

This course provides students with theory and clinical experience in the area of preventive and public health dentistry. Topics include etiology of dental disease; patient education techniques; plaque control techniques; types and use of fluoride; diet analysis for caries control; and dietary considerations for the dental patient.

**Prerequisite:** DENA 1080, DENA 1340

### **DENA 1050 | MICROBIOLOGY AND INFECTION CONTROL (30-30-3)**

Introduces fundamental microbiology and infection control techniques. Topics include classification, structure, and behavior of pathogenic microbes; mode of disease transmission; body's defense and immunity; infectious diseases; and infection control procedures in accordance with CDC recommendations and OSHA guidelines.

**Prerequisite:** Program Admission

### **DENA 1070 | ORAL PATHOLOGY AND THERAPEUTICS (30-0-2)**

This course focuses on the diseases affecting the oral cavity and pharmacology as it relates to dentistry. Topics include identification and disease process; signs/symptoms of oral diseases and systemic diseases with oral manifestations; developmental abnormalities of oral tissues; basic principle of pharmacology; drugs prescribed by the dental profession; drugs that may contraindicate treatment; and applied pharmacology (regulations, dosage, and applications).

**Prerequisite:** DENA 1010, DENA 1080

### **DENA 1080 | DENTAL BIOLOGY (75-0-5)**

This course focuses on normal head and neck anatomy and the development and functions of oral anatomy. Topics include dental anatomy; oral histology; oral embryology; osteology of the skull; muscles of mastication and facial expression; temporal mandibular joint; blood lymphatic nerve supply of the head; and salivary glands and related structures.

**Prerequisite:** Program Admission

#### **DENA 1090 | DENTAL ASSISTING NATIONAL BOARD EXAM PREPARATION (15-0-1)**

Reviews information concerning all didactic areas tested by the Dental Assisting National Board (DANB). Topics include collecting and recording clinical data; dental radiography; chairside dental procedures; prevention of disease transmission; patient education and oral health management; office management procedures; and test taking skills.

**Prerequisite:** Advisor Approval

#### **DENA 1340 | DENTAL ASSISTING I: GENERAL CHAIRSIDE (45-90-6)**

**Prerequisite:** Program Admission

This course introduces the student to ethics and jurisprudence for the dental assistant and to chairside assisting with diagnostic and operative procedures. Topics include ethics and jurisprudence in the dental office; four-handed dentistry techniques; clinical data collection techniques; introduction to operative dentistry; and dental material basics.

**Prerequisite:** DENA 1050, DENA 1080

#### **DENA 1350 | DENTAL ASSISTING II: DENTAL SPECIALTIES AND EFDA SKILLS (60-90-7)**

This course focuses on chairside assisting with dental specialty procedures. Topics include prosthodontic procedures (fixed and removable); orthodontics; pediatric dentistry; periodontic procedures; oral and maxillofacial surgery procedures; endodontics procedures; management of dental office emergencies; medically compromised patients and expanded functions approved by law for performance by dental assistants in the state of Georgia. Student will pass a comprehensive examination and successfully perform all required clinical skills to receive EFDA certification.

**Prerequisite:** DENA 1340

#### **DENA 1390 | DENTAL RADIOLOGY (45-30-4)**

After completion of the course the student will be able to provide radiation safety for patient and self, expose x-rays, process x-rays, and prepare dental films for the dental office. Topics include fundamentals of radiology and radiation safety; radiographic anatomy and interpretation; intraoral and extraoral radiographic techniques; and quality assurance techniques.

**Prerequisite:** DENA 1080

#### **DENA 1400 | DENTAL PRACTICE MANAGEMENT (15-30-2)**

This course emphasizes procedures for office management in dental practices. Topics include oral and written communication; records management; appointment control; dental insurance form preparation; accounting procedures; supply and inventory control; employability skills and basic computer skills. A computer lab provides basic skills in computer use and utilization of these skills to perform office procedures on a microcomputer.

**Prerequisite:** COMP 1000, DENA 1340

#### **DENA 1460 | DENTAL PRACTICUM I (0-45-1)**

Practicum focuses on infection control in the dental office and

assisting with diagnostic and simple operative procedures. Topics include infection control procedures; clinical diagnostic procedures; and general dentistry procedures.

**Prerequisite:** DENA 1050, DENA 1340, DENA 1350, DENA 1390

#### **DENA 1470 | DENTAL PRACTICUM II (0-45-1)**

Practicum focuses on advanced general dentistry procedures and chairside in dental specialties with special emphasis on nonsurgical specialties. Topics include advanced general dentistry and specialties.

**Prerequisite:** DENA 1460

#### **DENA 1480 | DENTAL PRACTICUM III (0-225-5)**

Practicum continues to focus on assisting chairside with advanced general dentistry procedures with emphasis on dental office management, preventive dentistry, and expanded functions. Topics include advanced general dentistry procedures; preventive dentistry; dental office management; expanded functions; chairside in specialties; and management of dental office emergencies.

**Prerequisite:** DENA 1460, DENA 1470

## **Drafting**

#### **DFTG 1015 | PRACTICAL MATHEMATICS FOR DRAFTING TECHNOLOGY (45-0-3)**

This course introduces and develops basic mathematic concepts needed to be successful in the drafting industry. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

**Prerequisite:** None

#### **DFTG 1101 | CAD FUNDAMENTALS (30-60-4)**

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.

**Prerequisite:** None

#### **DFTG 1103 | MULTIVIEW/BASIC DIMENSIONING (30-60-4)**

Multiview/Basic Dimensioning course 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.

**Prerequisite:** None

#### **DFTG 1105 | 3D MECHANICAL MODELING (30-60-4)**

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.

**Prerequisite:** None

#### **DFTG 1107 | ADVANCED DIMENSIONING/SECTIONAL VIEWS (30-60-4)**

Advanced Dimensioning/Sectional Views continues dimensioning skill development and introduces tools for precision measurement and sectional views.

**Prerequisite:** None

**DFTG 1109 | AUXILIARY VIEWS/SURFACE DEVELOPMENT (30-60-4)**

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.

**Prerequisite:** None

**DFTG 1111 | FASTENERS (30-60-4)**

This course covers the basics of identifying fastening techniques, interpreting technical data, and creating working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

**Prerequisite:** None

**DFTG 1113 | ASSEMBLY DRAWINGS (30-60-4)**

Assembly Drawings 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.

**Prerequisite:** None

**DFTG 1125 | ARCHITECTURAL FUNDAMENTALS (30-60-4)**

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.

**Prerequisite:** None

**DFTG 1127 | ARCHITECTURAL 3D MODELING (30-60-4)**

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.

**Prerequisite:** None

**DFTG 1129 | RESIDENTIAL DRAWING I (30-60-4)**

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.

**Prerequisite:** DFTG 1125

**DFTG 1131 | RESIDENTIAL DRAWING II (30-60-4)**

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.

**Prerequisite:** None

**DFTG 1133 | COMMERCIAL DRAWING I (30-60-4)**

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.

**Prerequisite:** None

**DFTG 2010 | ENGINEERING GRAPHICS (30-60-4)**

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 principles.

**Prerequisite:** None

**DFTG 2020 | VISUALIZATION AND GRAPHICS (15-90-3)**

This course is an introduction to engineering 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 prototype environment are emphasized.

**Prerequisite:** None

**DFTG 2040 | ADVANCED 3D MODELING MECHANICAL (15-95-4)**

In this course the student becomes acquainted with concepts of the software to Sheet Metal modeling for mechanical drafting, multi-body parts assemblies, and basic animation techniques for mechanical assembly presentations.

**Prerequisite:** None

**DFTG 2110 | BLUEPRINT READING FOR TECHNICAL DRAWING I (15-30-2)**

Introduces the fundamental principles and practices associated with interpreting technical drawings. Topics include: interpretation of blueprints and sketching.

**Prerequisite:** None

**DFTG 2120 | PRINT READING FOR ARCHITECTURE (15-60-3)**

This course emphasizes skills in reading, producing and interpreting construction drawings. Topics include: reading and measuring plans, identifying and understanding lines, symbols, dimensions, materials, schedules, and specifications.

**Prerequisite:** None

**DFTG 2130 | MANUAL DRAFTING FUNDAMENTALS (15-30-2)**

This course emphasizes the essential techniques of basic manual drafting. It introduces drafting tools and equipment, scale and measurement, line relationships and lettering, and geometric construction concepts.

**Prerequisite:** None

**DFTG 2210 | BLUEPRINT READING FOR TECHNICAL DRAWING II (15-30-2)**

This course continues the development of blueprint reading as applied to technical drawing. Topics include threads (inch and metric), auxiliary views, geometric tolerancing, and weldments.

**Prerequisite:** None



## Dental Hygiene

### DHYG 1000 | TOOTH ANATOMY AND ROOT MORPHOLOGY (30-0-2)

Provides the student with a thorough knowledge of external and internal morphological characteristics of human primary and secondary dentition. Also introduces the student to various tooth identification systems, classifications of occlusion and dental anomalies. Topics include: oral cavity anatomy, dental terminology, external and internal tooth anatomy, tooth nomenclature and numbering systems, individual tooth and root morphology, occlusion and dental anomalies.

**Prerequisite:** Program Admission

### DHYG 1010 | ORAL EMBRYOLOGY AND HISTOLOGY (15-0-1)

Focuses on the study of cells and tissues of the human body with emphasis on those tissues that compose the head, neck, and oral cavity. Topics include: cellular structure and organelles; histology of epithelium; histology of connective tissue; histology of muscle tissue; histology of nerve tissue; histology of oral mucosa and orofacial structures; embryological development of the head and neck; tooth development; and development of tooth supporting structures.

**Prerequisite:** Program Admission

### DHYG 1020 | HEAD AND NECK ANATOMY (30-0-2)

Focuses on anatomy of the head and neck. Emphasis is placed on those structures directly affected by the practice of dentistry. Topics include: terminology; anatomic landmarks; osteology of the skull; temporomandibular joint; muscles of mastication; muscles of facial expression; nervous system; blood supply of the head and neck; lymphatic system and immunology; endocrine and exocrine glands of the head and neck; nasal and paranasal sinuses; fascial spaces and the spread of dental infections; and anatomy concerning local anesthesia.

**Prerequisite:** Program Admission

### DHYG 1030 | DENTAL MATERIALS (15-30-2)

Focuses on the nature, qualities, composition and manipulation of materials used in dentistry. The primary goal of this course is to enhance the student's ability to make clinical judgments regarding the use and care of dental materials based on how these materials react in the oral environment. Topics include: dental materials standards, dental materials properties, impression materials, gypsum products, mouthguards and whitening systems, dental bases, liners and cements, temporary restorations, classifications for restorative dentistry, direct restorative materials, indirect restorative materials, polishing procedures for dental restorations, removable dental prostheses, sealants, and implants.

**Prerequisite:** Program Admission

### DHYG 1040 | PRECLINICAL DENTAL HYGIENE LECTURE (30-0-2)

Provides fundamental skills to be utilized in the delivery of optimum patient care by the dental hygienist. Topics include: patient assessment, instrumentation, charting, occlusion, caries, emergencies, ethics and professionalism, asepsis, and patient and clinician positioning.

**Prerequisite:** Program Admission

**Corequisite:** DHYG 1050

### DHYG 1050 | PRECLINICAL DENTAL HYGIENE LAB (0-90-2)

Provides fundamental skills to be utilized in the delivery of optimum patient care by the dental hygienist. Topics include: asepsis, ethics and professionalism, emergencies, patient assessment, patient and clinician positioning, instrumentation, charting, occlusion and caries.

**Prerequisite:** Program Admission

**Corequisite:** DHYG 1040

### DHYG 1070 | RADIOLOGY LECTURE (30-0-2)

Emphasizes the application of radiology principles in the study of the teeth and their surrounding structures. Topics include: radiation physics principles; radiation biology; radiation safety; radiographic quality assurance; imaging theory; radiographic interpretation; radiographic need; legal issues of dental radiography; and digital radiography techniques and principles.

**Prerequisite:** DHYG 1020

### DHYG 1090 | RADIOLOGY LAB (0-30-1)

Emphasizes the application of radiology principles in the study of the teeth and their surrounding structures. Topics include: radiation safety, radiographic quality assurance, imaging theory, radiographic interpretation, radiographic need, and digital radiography principles and techniques.

**Prerequisite:** DHYG 1020

### DHYG 1110 | CLINICAL DENTAL HYGIENE I LECTURE (30-0-2)

Continues the development of knowledge in patient care. Topics include: prevention, instrumentation, patient management, dental appliances, and treatment planning.

**Prerequisite:** DHYG 1040

**Corequisite:** DHYG 1111

### DHYG 1111 | CLINICAL DENTAL HYGIENE I LAB (0-135-3)

Continues the development of knowledge in patient care. Topics include: prevention, instrumentation, patient management, dental appliances, treatment planning, and applied techniques.

**Prerequisite:** DHYG 1050

**Corequisite:** DHYG 1110

### DHYG 1206 | PHARMACOLOGY AND PAIN CONTROL (45-0-3)

Introduces principles of basic pharmacology as they pertain to the practice of dentistry and dental hygiene. Emphasizes actions and reactions of medications commonly used in the dental office or taken by dental patients. Topics include: pharmaceutical referencing; legal and ethical considerations; drug effects; contraindications; drug related emergencies; dental related anesthesia; and pain control.

**Prerequisite:** Program Admission

### DHYG 2010 | CLINICAL DENTAL HYGIENE II LECTURE (30-0-2)

Continues the development of student knowledge in treating patients and preventing oral disease. Topics include: instrument sharpening; patient assessment; antimicrobial use; pulp vitality testing; treatment of hypersensitivity; whitening; implant care; tobacco cessation; pit and fissure sealants, scaling, debridement and root planing; ultrasonics and air polishing and dietary analysis.

**Prerequisite:** DHYG 1070, DHYG 1110

**Corequisite:** DHYG 2020

**DHYG 2020 | CLINICAL DENTAL HYGIENE II LAB (0-90-2)**

Continues the development of student knowledge in treating patients and preventing oral disease. Topics include: instrument sharpening; patient assessment; antimicrobial use; pulp vitality testing; treatment of hypersensitivity; whitening; implant care; tobacco cessation; pit and fissure sealants; scaling, debridement and root planing; ultrasonics and air polishing; dietary analysis, and applied techniques.

**Prerequisites:** DHYG 1070, DHYG 1090, DHYG 1111  
**Corequisite:** DHYG 2010

**DHYG 2050 | GENERAL AND ORAL PATHOLOGY / PATHOPHYSIOLOGY (45-0-3)**

Introduces pathology as a specialty of dentistry and includes the etiology, pathogenesis and recognition of various pathological conditions. Emphasis is placed on oral and paraoral pathology and systemic conditions affecting the head and neck. Topics include: terminology and biopsy procedures; inflammation, repair, and regeneration; soft tissue and dental anomalies; pathogenesis of caries and pulpal pathology; cysts and tumors of the head and neck; systemic conditions that affect the oral structures; infectious diseases; diseases of the salivary glands; diseases of bone; blood dyscrasias; vesiculo-erosive and autoimmune diseases; and genetic diseases and syndromes of the head and neck.

**Prerequisites:** DHYG 1010, DHYG 1020

**DHYG 2070 | COMMUNITY DENTAL HEALTH (15-60-3)**

Provides students with a broad understanding of the healthcare system and an objective view of the significant social, political, psychological and economic forces directing the system. Prepares students to promote oral health and prevent oral disease in a community, by meeting specific dental health needs of community groups. Topics include: epidemiology; community dental care assessment; community dental care provision; preventive counseling for groups; group oral health education; terminology; dental care systems; biostatistics; and concepts of dental research.

**Prerequisite:** DHYG 1110

**DHYG 2080 | CLINICAL DENTAL HYGIENE III LECTURE (30-0-2)**

Continues the development of student knowledge necessary for treatment and prevention of oral diseases. Topics include: treatment of patients with special needs.

**Prerequisite:** DHYG 2010  
**Corequisite:** DHYG 2090

**DHYG 2090 | CLINICAL DENTAL HYGIENE III LAB (0-180-4)**

Continues the development of student skills necessary for treatment and prevention of oral disease. Topics include: special needs patients and applied techniques.

**Prerequisite:** DHYG 2020  
**Corequisite:** DHYG 2080

**DHYG 2110 | BIOCHEMISTRY AND NUTRITION FUNDAMENTALS FOR THE DENTAL HYGIENIST (30-0-2)**

Provides a basic introduction to organic chemistry and biochemistry. Familiarizes students with the role of nutrition in the human body with an emphasis on the dental hygienist's role as a nutritional educator. Topics include: molecular structure, carbohydrates, proteins, nutrition and digestion, bioenergetics, nutritional aspects, nutritional disorders, and diet assessment.

**Prerequisite:** None

**DHYG 2130 | CLINICAL DENTAL HYGIENE IV LECTURE (30-0-2)**

Focuses on the dental hygiene field and presents the fundamental concepts and principles necessary for successful participation in the dental profession. Topics include: employability skills; State of Georgia Dental Practice Act; office management; expanded duties; legal aspects; ethics; dental hygiene practice settings; and dentistry and dental hygiene regulation.

**Prerequisite:** DHYG 2080  
**Corequisite:** DHYG 2140

**DHYG 2140 | CLINICAL DENTAL HYGIENE IV LAB (0-180-4)**

Continues the development of student skills necessary for treatment and prevention of oral disease. Topics include: applied techniques and time management.

**Prerequisite:** DHYG 2090  
**Corequisite:** DHYG 2130

**DHYG 2200 | PERIODONTOLOGY (45-0-3)**

Provides fundamental information on periodontal anatomy, pathogenesis of the periodontal diseases, and an introduction to modern rational periodontal therapy, including preventive, non-surgical, and surgical methods. Topics include: tissues of the periodontium; periodontal pathology; periodontal diseases; assessment and treatment planning; periodontal disease therapy; and periodontal emergencies.

**Prerequisite:** DHYG 1010

**Diesel Engine Technology****DIET 1000 | INTRODUCTION TO DIESEL TECHNOLOGY, TOOLS, AND SAFETY (20-58-3)**

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.

**Prerequisite:** None

**DIET 1010 | DIESEL ELECTRICAL AND ELECTRONIC SYSTEMS (36-173-7)**

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.

**Prerequisite:** None  
**Corequisite:** DIET 1000

**DIET 1020 | PREVENTATIVE MAINTENANCE (44-76-5)**

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.

**Prerequisite:** None  
**Corequisite:** DIET 1010

**DIET 2010 | TRUCK BRAKE SYSTEMS (15-112-4)**

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.

**Prerequisite:** None

**Corequisite:** DIET 1000, DIET 1010

### DIET 2020 | TRUCK DRIVETRAINS (33-66-4)

This course introduces drive train systems used on medium/heavy duty trucks. Topics include: clutches, transmissions, drive shafts and universal joints, and drive axles.

**Prerequisite:** None

**Corequisite:** DIET 1000, DIET 1010

## Design and Media Production

### DMPT 1000 | INTRODUCTION TO DESIGN (30-60-4)

Introduces students to the fundamentals of design concepts, including design, composition and layout, color theory and typography.

**Prerequisite:** None

### DMPT 1005 | VECTOR GRAPHICS (30-60-4)

This course is an introduction to the creation of vector imagery. Students will learn to draw illustrations, transform objects, work with layers, patterns, brushes, and filters, use effects and create graphics for the various applications. The focus will be on learning the essential tools, basic operation and commands used in the creation of vector graphics used in different media fields.

**Prerequisite:** None

### DMPT 1010 | RASTER IMAGING (30-60-4)

In the Raster Imaging course, the student becomes acquainted with the concepts and software related raster image manipulation. The student is introduced to the workspace and tools used in an image editing software and will learn basic image editing techniques.

**Prerequisite:** None

### DMPT 1055 | INTRODUCTION TO MEDIA TECHNOLOGY (30-60-4)

This course covers the basics of computer terminology, operating systems, input/output devices, file formatting, file management, and overview of software.

**Prerequisites:** None

### DMPT 1600 | INTRODUCTION TO VIDEO PRODUCTION (30-60-4)

This course is an introduction to the creative and technical aspects of video production. Students will learn the basic terminology and techniques of video production through analysis of produced video works as well as hands-on experience. Students will be introduced to basic digital video production including: pre-production and planning, camera operation and framing, lighting, sound, and post-production with basic editing.

**Prerequisite:** None

### DMPT 2330 | INTRODUCTION TO CONTENT

### MANAGEMENT SYSTEMS (30-60-4)

In this introduction to CMS, the student learns the basics of installing and configuring a Content Management System (CMS) to easily build blogs and small web sites. Students will perform common tasks using any of the most popular (and free) Content Management Systems.

**Prerequisite:** COMP 1000

### DMPT 2400 | BASIC 3D MODELING AND ANIMATION (30-60-4)

An introduction to 3D Animation software and component visualization. Students will be introduced to software and basic techniques to begin creating models and material for animation projects. Students will also be introduced to basic lighting and animation concepts so that they will be able to develop a complete animation using 3D software at the end of this course.

**Prerequisite:** None

### DMPT 2600 | BASIC VIDEO EDITING (30-60-4)

An introduction to basic audio and video editing techniques used in digital video production with non-linear software. Students will be introduced to the primary feature set and interface of video editing software and will learn to perform basic editing functions that include setup, adjusting and customizing preferences and settings, capturing video and audio, various editing and trimming techniques and tools, audio editing and audio creation, finishing and output.

**Prerequisites:** None

### DMPT 2605 | INTRODUCTION TO VIDEO COMPOSITING AND BROADCAST ANIMATION (30-60-4)

This course introduces how to create and animate motion graphics. Students will learn to create dynamic animated titles and logos, animate raster and vector image file graphics, composite and edit multi-layered special effects using footage, work with shapes and masks, work with 3D elements, apply and animate various effect filters, and analyze and compress digital video for different output specifications. Students will be exposed to compositing concepts, techniques, and terminology used in finalizing a video or animation project.

**Prerequisite:** DMPT 1010

### DMPT 2610 | INTERMEDIATE VIDEO COMPOSITING AND BROADCAST ANIMATION (30-60-4)

This course will expose students to advanced techniques used in finalizing a video or animation project using compositing software. The class will reinforce compositing concepts, workflow techniques and terminology that students have learned in previous classes. More advanced tools and techniques will be introduced to focus on overall project workflow.

**Prerequisite:** DMPT 2605

### DMPT 2615 | INTERMEDIATE VIDEO EDITING (30-60-4)

This course will focus on more advanced editing and finishing techniques. Students will explore different editing styles and techniques for different genres and learn how to use these techniques to create complex compositions with polished transitions, fix screen direction errors, edit multi-camera projects, edit and mix audio, work with nested sequences, create effects, use filters creatively, color correct video, and manage clips and media.

**Prerequisite:** DMPT 2600

### DMPT 2640 | COLOR GRADING (30-60-4)

This course will introduce students to color balancing and grading techniques.

**Prerequisite:** DMPT 2600

#### **DMPT 2650 | VISUAL EFFECTS (30-60-4)**

The course will teach students techniques in compositing video with visual effects which includes incorporating 3D elements and pre-keyed footage, applying digital lighting and shading techniques, and applying 3rd party plugins with the goal of creating realistic-looking visual effects.

**Prerequisite:** DMPT 2605

#### **DMPT 2660 | SPECIAL PROJECTS (0-120-4)**

In this course students will work closely with the instructor to develop complex, portfolio quality work that reflects his or her skill set in postproduction. Depending on complexity, the instructor may ask students to create a single project, or multiple projects. These may include, but are not limited to, works using motion graphics, visual effects, animation, editing, color grading, or post-production audio.

**Prerequisite:** Advisor Approval

#### **DMPT 2905 | PRACTICUM/INTERNSHIP II (0-180-4)**

Provides an approved industry-like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

**Prerequisite:** Advisor Approval

#### **DMPT 2930 | EXIT REVIEW (0-180-4)**

Emphasis is placed on student's production of portfolio-quality pieces. Focuses on the preparation for entry into the job market.

**Prerequisite:** Advisor Approval

## **Medical Diagnostic Sonography**

#### **DMSO 1040 | SONOGRAPHIC PHYSICS AND INSTRUMENTATION (15-60-3)**

Sonographers apply principles of ultrasound in the operation of medical sonographic equipment to produce a sonogram. Knowledge of the interaction of ultrasound with tissue is important for image optimization, acquisition and interpretation of sonographic images, and critical to the accurate diagnosis of disease. Introduces concepts for the factors involved with diagnostic ultrasound principles and instruments. Emphasis will be placed on ultrasound physics, transducer construction, operation and characteristics, artifacts, sonographic transducers and sound beams, hemodynamic and Doppler imaging, sonographic instrumentation, quality assurance/quality control of sonographic instruments, bioeffects and safety. Student laboratory scanning hours are included in this course.

**Prerequisite:** Program Admission

#### **DMSO 1080 | SONOGRAPHIC PHYSICS AND INSTRUMENTATION REGISTRY REVIEW (0-30-1)**

Provides a review of knowledge from previous courses and helps the student prepare for national certification examinations for sonography. Information concerning test taking skills will also be reviewed. Topics include: patient care, safety and communication, physics principles, ultrasound transducers, pulse-echo instrumentation, Doppler instrumentation, and quality assurance/quality control of equipment.

**Prerequisite:** DMSO 1040

## **Early Childhood Care and Education**

#### **ECCE 1101 | INTRODUCTION TO EARLY CHILDHOOD CARE AND EDUCATION (45-0-3)**

This course 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.

**Prerequisite:** None

#### **ECCE 1103 | CHILD GROWTH AND DEVELOPMENT (45-0-3)**

This course 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.

**Prerequisite:** None

#### **ECCE 1105 | HEALTH, SAFETY, AND NUTRITION (30-30-3)**

This course 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.

**Prerequisite:** None

#### **ECCE 1112 | CURRICULUM AND ASSESSMENT (30-30-3)**

This course 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.

**Prerequisites/Co-Prerequisite:** ECCE 1103

#### **ECCE 1113 | CREATIVE ACTIVITIES FOR CHILDREN (30-30-3)**

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.

**Prerequisite:** None

**ECCE 1120 | EARLY CHILDHOOD CARE AND EDUCATION PRACTICUM I (15-90-3)**

This course provides the student with a supervised opportunity to gain experience in the actual lab or job setting to observe children and teaching in action. Practicum training topics include good work habits; supervised interaction with children, parents, and co-workers; observation for the purpose of assessment and evaluation; and documentation of a child's development.

**Prerequisite:** Advisor Approval

**ECCE 1121 | EARLY CHILDHOOD CARE AND EDUCATION PRACTICUM II (15-90-3)**

This course 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.

**Prerequisite/Co-Prerequisite:** ECCE 1105

**ECCE 2115 | LANGUAGE AND LITERACY (30-30-3)**

This course 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.

**Prerequisite/Co-Prerequisite:** ECCE 1103

**ECCE 2116 | MATH AND SCIENCE (30-30-3)**

This course presents the process of introducing math and science concepts to young children; which 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.

**Prerequisite/Co-Prerequisite:** ECCE 1103

**ECCE 2201 | EXCEPTIONALITIES (45-0-3)**

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.

**Prerequisite:** ECCE 1103

**ECCE 2202 | SOCIAL ISSUES AND FAMILY INVOLVEMENT (45-0-3)**

This course 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.

**Prerequisite:** None

**ECCE 2203 | GUIDANCE AND CLASSROOM MANAGEMENT (45-0-3)**

This course 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.

**Prerequisite:** ECCE 1103

**ECCE 2245 | EARLY CHILDHOOD CARE AND EDUCATION INTERNSHIP I (0-270-6)**

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.

**Prerequisite:** ECCE 1101, ECCE 1103, ECCE 1105

**ECCE 2310 | PARAPROFESSIONAL METHODS AND MATERIALS (45-0-3)**

This course 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.

**Prerequisite:** ECCE 1103

**ECCE 2312 | PARAPROFESSIONAL ROLES AND MATERIALS (45-0-3)**

This course 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.

**Prerequisite:** ECCE 1103

**ECCE 2320 | PROGRAM ADMINISTRATION AND FACILITY MANAGEMENT (45-0-3)**

Provides training in planning, implementation, and maintenance of an effective early childhood program and facility. Topics include organization, mission, philosophy, goals of a program; types of programs; laws, rules, regulations, accreditation, and program evaluation; needs assessment; administrative roles and board of directors; anti-bias program development; child development and developmentally appropriate practices; marketing, public and community relations, grouping, enrollment and retention; working with families; professionalism and work ethics;

space management; money management; and program, equipment, and supplies management.

**Prerequisite:** None

### ECCE 2322 | PERSONNEL MANAGEMENT (45-0-3)

Provides training in early childhood personnel management. Topics include staff records; communication; personnel policies; managing payroll; recruitment, interviewing, selection, hiring, motivating, and firing; staff retention; staff scheduling; staff development; staff supervision; conflict resolution; staff evaluations; ethical responsibilities to employees; and time and stress management.

**Prerequisite:** None

### ECCE 2330 | INFANT/TODDLER DEVELOPMENT (45-0-3)

This course introduces the three developmentally meaningful age periods during infancy. Provides knowledge, grounded in brain and attachment research, about how children learn and the skills and attitudes necessary to support optimum social/emotional, cognitive, and physical development for children from birth to three. Principles of brain development and language and communication will be explored in depth. Special emphasis is placed on experiential learning to show caregivers practical ways of meeting the fundamental needs of all infants in group care settings and of helping them learn the lessons that every infant comes into the world eager to learn. The needs of infants and toddlers with established disabilities as well as those at risk for developmental problems will be examined from the perspective of early intervention and inclusion.

**Prerequisite:** None

### ECCE 2332 | INFANT/TODDLER GROUP CARE AND CURRICULUM (45-0-3)

This course provides the knowledge and skills necessary to meet the fundamental needs of children from birth to three in group care settings. Establishes a foundation for a responsive, relationship-based curriculum for children birth to three who are in group care settings. Introduces the philosophy behind primary care, continuity of care, and respectful care. Explores ways of creating environments for infant/toddler group care which foster optimum social/emotional, physical and cognitive development, promote cultural sensitivity and encourage positive parent caregiver relations.

**Prerequisite:** None

### ECCE 2360 | CLASSROOM STRATEGIES FOR EXCEPTIONAL CHILDREN (45-0-3)

Prepares child care providers and paraprofessionals with knowledge and skills in the areas of working effectively with children with a disability; working with families as partners; examining the laws and regulations; exploring resources, service providers, and agencies that may assist the child and his/her family; examining the adaptations and modifications to facilities and environments; reviewing the referral process; implementing inclusion; modifying instruction to accommodate the child with special needs; and investigating ways to document and chart observations.

**Prerequisite:** ECCE 2201

### ECCE 2362 | EXPLORING YOUR ROLE IN THE EXCEPTIONAL ENVIRONMENT (30-45-3)

Prepares child care providers and paraprofessionals with knowledge and skills for screening and assessing purposes; and explores resources, service providers, and agencies that may assist the child and families in educational or natural settings. Examines adaptations, accommodations, and modifications to environments; reviews the referral process; implements inclusion and modifies instruction to

accommodate the child with special needs.

**Prerequisite:** ECCE 2201

## Electrical & Computer Engineering Technology

### ECET 1101 | CIRCUIT ANALYSIS I (45-45-4)

*Prior to Summer 2018 (201816)*

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.

**Prerequisite:** None

**Corequisite:** ENGT 1000, MATH 1111

### ECET 1102 | CIRCUIT ANALYSIS I (45-0-3)

*Effective Summer 2018 (201816)*

This course 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.

**Prerequisite:** None

**Co-requisite:** ECET 1102L, ENGT 1000, MATH 1111

### ECET 1102L | CIRCUIT ANALYSIS I LAB (0-45-1)

*Effective Summer 2018 (201816)*

This course contains selected lab exercises that parallel ECET 1102. Laboratory work includes circuit construction, use of appropriate instruments, troubleshooting and circuit simulation using P-SPICE. Laboratory work emphasizes 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 and transient analysis.

**Prerequisite:** None

**Co-requisites:** ECET 1102, ENGT 1000, MATH 1111

### ECET 1110 | DIGITAL SYSTEMS I (45-45-4)

*Prior to Summer 2018 (201816)*

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.

**Prerequisite:** ENGT 1000, MATH 1113

### ECET 1111 | DIGITAL SYSTEMS I (45-45-4)

*Effective Summer 2018 (201816)*

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.

**Prerequisite:** ENGT 1000

Co-requisite: ECET 1111L

### **ECET 1111L | DIGITAL SYSTEMS I LAB (0-45-1)**

*Effective Summer 2018 (201816)*

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 classwork using trainers, DesignWorks, and Altera simulation software and system.

Prerequisite: ENGT 1000

Co-requisite: ECET 1111

### **ECET 2101 | CIRCUIT ANALYSIS II (45-45-4)**

*Prior to Summer 2018 (201816)*

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.

Prerequisite: ECET 1101, MATH 1113

### **ECET 2102 | CIRCUIT ANALYSIS II (45-0-3)**

*Effective Summer 2018 (201816)*

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.

Prerequisite: ECET 1101, MATH 1111

Co-requisite: ECET 2102L

### **ECET 2102L | CIRCUIT ANALYSIS II LAB (0-45-1)**

*Effective Summer 2018 (201816)*

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.

Prerequisite: ECET 1101, MATH 1111

Co-requisites: ECET 2102

### **ECET 2120 | ELECTRONIC CIRCUITS I (45-45-4)**

*Prior to Summer 2018 (201816)*

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.

Prerequisite: MATH 1113

### **ECET 2121 | ELECTRONIC CIRCUITS I (45-0-3)**

*Effective Summer 2018 (201816)*

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.

Co-requisite: ECET 2121L

### **ECET 2121L | ELECTRONIC CIRCUITS I LAB (0-45-1)**

*Effective Summer 2018 (201816)*

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.

Co-requisite: ECET 2121

## **Electrocardiography**

### **ECGT 1030 | INTRODUCTION TO ELECTROCARDIOGRAPHY (60-30-5)**

Provides an introduction to electrocardiography techniques and record keeping. Emphasis is placed on the knowledge and skills needed to perform ECG on all types of patients. Topics include: infection control techniques, basic life support, legalities and ethics, basic cardiovascular anatomy and physiology, ECG techniques and recognition, ECG lead placement, technical aspects of the ECG, ECG rhythm strip interpretation, advanced ECG techniques and a Cardiovascular Credentialing International (CCI) exam review.

Prerequisite: ENGL 1010, MATH 1011, PSYC 1010

Corequisite: ALHS 1011, ALHS 1090, ECGT 1050

### **ECGT 1050 | ELECTROCARDIOGRAPHY PRACTICUM (0-225-5)**

Provides an introduction to clinical practice in the setting of hospitals, clinics, and medical offices. Students must demonstrate regard for the dignity, rights, and privacy of each patient. They must also abide by the policies and procedures of each clinical setting. Students will be able to learn by doing electrocardiography techniques and record keeping. Emphasis is placed on the application of knowledge and skills gained in the classroom. Students will have the opportunity to display their ability to interact appropriately with patients, family members, and other members of the healthcare team. Students may be required to perform Basic Life Support. Topics include: application of classroom knowledge and skills and functioning in the work environment.

Prerequisite: ENGL 1010, MATH 1012, PSYC 1010

Corequisite: ALHS 1011, ALHS 1090, ECGT 1030

## **Echocardiography**

### **ECHO 1100 | ECHOCARDIOGRAPHY FUNDAMENTALS (30-30-3)**

This course introduces the basic principles and applications of the physical assessment and echocardiographic procedures. Discussion of medical law and ethics as it relates to the professional scope of practice. Topics include basic echocardiographic imaging principles, patient skills and equipment instrumentation, basic Doppler and color principles, medical law and ethics and common terminology and abbreviations.

Prerequisite: Program Admission

### **ECHO 1310 | ECHOCARDIOGRAPHY I (0-90-3)**

This course utilizes cardiac sonography fundamentals to

evaluate cardiac anatomy, function and hemodynamics in diagnosing coronary artery heart disease. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis on performance and interpretation of M-mode, 2-dimensional, and Doppler echocardiography. Emphasis will be placed on obtaining quality echocardiograms, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: ventricular function, coronary artery disease, stress echocardiography, transesophageal echocardiography (TEE), 3-D/4-D Echocardiography, contrast echocardiography and advanced techniques/procedures.

**Prerequisite:** ECHO 1100

### **ECHO 1320 | ECHOCARDIOGRAPHY II (0-90-3)**

This course utilizes fundamentals to evaluate cardiac function and acquired disease states. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis on performance and interpretation of M-mode, 2-dimensional, and Doppler echocardiography. Emphasis will be placed on obtaining quality echocardiograms, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: valvular heart disease, cardiomyopathies, systemic and pulmonary hypertensive heart disease, pericardial diseases, systemic disease, cardiac transplantation, cardiac tumors/masses, diseases of the aorta, pericardial diseases, and miscellaneous topics.

**Prerequisite:** Program Admission

**Corequisite:** Program Admission

### **ECHO 1370 | ECHOCARDIOGRAPHY CLINICAL I (0-315-7)**

This course provides hands-on experience in performing noninvasive cardiovascular procedures with emphasis on instrumentation and development of clinical techniques. Topics include: policies and procedures, echocardiographic instrumentation, recording patient information, patient preparation, and performing echocardiographic examinations.

**Prerequisite:** Program Admission

**Corequisite:** Program Admission

### **ECHO 1371 | ECHOCARDIOGRAPHY CLINICAL I (PART A) (0-180-4)**

Provides hands-on experience in performing noninvasive procedures with emphasis on instrumentation and development of clinical techniques. Topics include policies and procedures, echocardiographic instrumentation, recording patient information, patient preparation, and performing echocardiographic examinations.

**Prerequisite:** Program Admission

### **ECHO 1372 | ECHOCARDIOGRAPHY CLINICAL I (PART B) (0-135-3)**

Provides hands-on experience in performing noninvasive procedures with emphasis on instrumentation and development of clinical techniques. Topics include policies and procedures, echocardiographic instrumentation, recording patient information, patient preparation, and performing echocardiographic examinations.

**Prerequisite:** Program Admission

### **ECHO 2310 | PEDIATRIC ECHOCARDIOGRAPHY (30-30-3)**

This course offers an introduction to congenital heart disease with instruction on fetal cardiac embryology, pediatric pathology, age appropriate patient care, corrective surgical procedures. Emphasis is placed on the latest modalities

and specialties of a pediatric noninvasive cardiac diagnostic study. Topics include: fetal cardiac embryology, acyanotic lesions, cyanotic lesions, complex congenital heart disease, corrective surgical procedures, Doppler, color flow, and 2-D imaging, research methods, syndromes, sedation, and transducer selection.

**Prerequisite:** Program Admission

**Corequisite:** Program Admission

### **ECHO 2360 | ECHOCARDIOGRAPHY CLINICAL II (0-315-7)**

This course provides hands-on experience in the clinical setting with an emphasis placed on the development of clinical techniques employed to obtain meaningful data. Continued participation by the student will progressively lead to the student performing diagnostic procedures with less assistance but under the supervision of an appropriately credentialed sonographer. Topics include: echocardiographic instrumentation, logging and reporting information, preparation for echocardiographic examinations, medical ethics and performing echocardiographic procedures. Students may do a brief rotation through an invasive cardiology lab, pediatric lab and/or vascular lab.

**Prerequisite:** Program Admission

**Corequisite:** Program Admission

### **ECHO 2361 | ECHOCARDIOGRAPHY CLINICAL II (PART A) (0-180-4)**

This course provides hands-on experience in the clinical setting with an emphasis placed on the development of clinical techniques employed to obtain meaningful data. Continued participation by the student will progressively lead to the student performing diagnostic procedures with less assistance but under the supervision of an appropriately credentialed sonographer. Topics include: echocardiographic instrumentation, logging and reporting information, preparation for echocardiographic examinations, medical ethics and performing echocardiographic procedures. Students may do a brief rotation through an invasive cardiology lab, pediatric lab and/or vascular lab.

**Prerequisite:** Program Admission

### **ECHO 2362 | ECHOCARDIOGRAPHY CLINICAL II (PART B) (0-135-3)**

This course provides hands-on experience in the clinical setting with an emphasis placed on the development of clinical techniques employed to obtain meaningful data. Continued participation by the student will progressively lead to the student performing diagnostic procedures with less assistance but under the supervision of an appropriately credentialed sonographer. Topics include: echocardiographic instrumentation, logging and reporting information, preparation for echocardiographic examinations, medical ethics and performing echocardiographic procedures. Students may do a brief rotation through an invasive cardiology lab, pediatric lab and/or vascular lab.

**Prerequisite:** Program Admission

### **ECHO 2370 | ECHOCARDIOGRAPHY CLINICAL III (0-450-10)**

This course builds on the knowledge and skills learned in Clinical Echo 3. By the end of this rotation, the student will perform all echocardiography procedures independently with the supervision of an appropriately credentialed sonographer. This course provides a culminating clinical setting experience which allows students to synthesize information and procedural instruction provided throughout the program. Emphasis is placed on skill level improvements and final completion of all required clinical competencies presented in previous courses and practiced



in previous clinical vascular courses. Topics include: scanning, documentation of pathologies, patient and equipment skills, current literature, professionalism, and ethical behavior.

**Prerequisite:** Program Admission

**Corequisite:** Program Admission

### **ECHO 2400 | COMPREHENSIVE REGISTRY REVIEW (0-30-1)**

This course will be an overall review of Echocardiography to include demonstration of normal and abnormal cardiac anatomy, cardiac physiology, pathophysiology and hemodynamics/physics in the different types of cardiac disease/dysfunctions. Also included will be a review of clinical non-invasive cardiac diagnostic procedures, laboratory values, pharmacology and test validation and measurements. Emphasis is placed on reviewing information so that the student will successfully pass the ARMDS and/or CCI certification examinations. Topics include: normal and abnormal cardiac anatomy, techniques, pathology, physics/hemodynamics, test validation and measurements, and laboratory values.

**Prerequisite:** ECHO 2310

**Corequisite:** ECHO 2370

## **Economics**

### **ECON 1101 | PRINCIPLES OF ECONOMICS (45-0-3)**

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

**Prerequisite:** Regular Admission

## **Electronics Technology**

### **ELCR 1005 | SOLDERING TECHNOLOGY (0-30-1)**

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.

**Prerequisite:** None

### **ELCR 1010 | DIRECT CURRENT CIRCUITS (75-30-6)**

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, DC theorems, and applied Algebraic concepts.

**Prerequisites:** Program Ready

### **ELCR 1020 | ALTERNATING CURRENT CIRCUITS (75-60-7)**

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.

**Prerequisites:** ELCR 1010

### **ELCR 1030 | SOLID STATE DEVICES (60-30-5)**

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.

**Prerequisite:** ELCR 1020

### **ELCR 1040 | DIGITAL AND MICROPROCESSOR FUNDAMENTALS (45-60-5)**

This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary 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.

**Prerequisite:** ELCR 1020

### **ELCR 1060 | LINEAR INTEGRATED CIRCUITS (30-30-3)**

This course provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operation amplifier, timers, and three-terminal voltage regulators.

**Prerequisites:** ELCR 1020

### **ELCR 1230 | COMMUNICATIONS ELECTRONICS SURVEY (45-0-3)**

This course introduces the fundamental concepts and devices used in electronics communications. Topics include transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

**Prerequisite:** None

### **ELCR 2210 | ANALOG COMMUNICATIONS (45-60-5)**

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.

**Prerequisite:** ELCR 1020

### **ELCR 2220 | DIGITAL COMMUNICATIONS (30-30-3)**

This course continues the study of modulation and detection techniques. Topics include digital modulation techniques, and sampling techniques.

**Prerequisite:** ELCR 1020

### **ELCR 2230 | ANTENNA AND TRANSMISSION LINES (30-30-3)**

This course 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.

**Prerequisite:** ELCR 1020

**ELCR 2240 | MICROWAVE COMMUNICATIONS AND RADAR (45-0-3)**

This course 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.

**Prerequisite:** ELCR 1020

**ELCR 2250 | OPTICAL COMMUNICATIONS TECHNIQUES (30-30-3)**

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.

**Prerequisite:** ELCR 1020

**Electrical Technology****ELTR 1000 | FUNDAMENTAL ELECTRICAL CONCEPTS (45-45-4)**

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.

**Prerequisite:** None

**ELTR 1010 | DIRECT CURRENT FUNDAMENTALS (30-30-3)**

Introduces direct current (DC) concepts and applications. Topics include electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; laboratory procedures and safety practices.

**Prerequisite:** None

**ELTR 1015 | INTERMEDIATE ELECTRICAL CONCEPTS I (45-45-4)**

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.

**Prerequisite:** None

**ELTR 1020 | ALTERNATING CURRENT FUNDAMENTALS (30-30-3)**

This course 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.

**Prerequisite:** None

**ELTR 1025 | INTERMEDIATE ELECTRICAL CONCEPTS II (45-45-4)**

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.

**Prerequisite:** None

**ELTR 1030 | ELECTRICAL SYSTEMS BASICS II (75-60-7)**

This course introduces electrical theory and principles used in residential, commercial, and industrial wiring applications. Emphasis is placed in electron theory, DC and AC circuits, Ohm's law, test equipment, transformers, and electrical power

systems. Topics include electricity production, electrical formulas, test equipment, transformer fundamentals, and fundamentals of AC and DC circuits.

**Prerequisite:** None

**ELTR 1035 | ADVANCED ELECTRICAL CONCEPTS (45-45-4)**

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.

**Prerequisites:** None

**ELTR 1055 | ADVANCED ELECTRICAL CONCEPTS II (45-45-4)**

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.

**Prerequisite:** None

**ELTR 1060 | ELECTRICAL PRINTS, SCHEMATICS AND SYMBOLS (15-30-2)**

This course 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.

**Prerequisite:** None

**ELTR 1065 | SPECIALITY ELECTRICAL CONCEPTS I (45-45-4)**

This course introduces students to specialty situations found in the electrical construction trade. Topics include specialty load calculations, health care facilities, standby and emergency systems, fire alarms, and advanced controls.

**Prerequisite:** None

**ELTR 1075 | SPECIALITY ELECTRICAL CONCEPTS II (45-45-4)**

This course continues the introduction to special electrical situations. Topics include HVAC controls, heat tracing and freeze protection, motor operation and maintenance, medium-voltage terminations and splices, and fundamentals of crew leadership.

**Prerequisite:** None

**ELTR 1080 | COMMERCIAL WIRING I (60-30-5)**

This course introduces commercial wiring practices and procedures. Topics include industrial safety procedures, the National Electrical Code, commercial load calculations, three-phase power systems, and fundamentals of AC motor control.

**Prerequisite:** None

**ELTR 1090 | COMMERCIAL WIRING II (15-60-3)**

This course is a continuation of the study in commercial wiring practices and procedures. Topics include transformer connections, an introduction to low voltage systems, conduit design and installation practices, and system design concepts.

**Prerequisite:** None

**ELTR 1110 | ELECTRIC MOTORS (48-36-4)**

This course 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.

**Prerequisite:** None

#### **ELTR 1120 | VARIABLE SPEED/LOW VOLTAGE CONTROLS (18-34-2)**

This course introduces types of electric motor control, reduced voltage starting, and applications. Emphasis will be placed on motor types, controller types, and applications. Includes information on wye and delta motor connections; part wind, autotransformer; adjustable frequency drives and other applications; and oscilloscopes and their operation. Topics include types of reduced voltage starting, reduced voltage motor connections, and adjustable frequency drive.

**Prerequisite:** None

#### **ELTR 1180 | ELECTRICAL CONTROLS (30-60-4)**

This course 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.

**Prerequisite:** None

#### **ELTR 1205 | RESIDENTIAL WIRING I (30-30-3)**

This course introduces residential wiring practices and procedures. Topics include residential circuits, print reading, National Electrical Code, wiring materials, determining the required number and location of lighting/receptacles and small appliance circuits, wiring methods (size and type conductors, box fill calculations and voltage drop), switch control of luminaries, receptacle installation including bonding, GFCI and AFCI circuits, special purposes outlets - ranges, cook tops, ovens, dryers, water heaters, sump pumps, and sizing OCPDs (circuit breakers and fuses).

**Prerequisite:** None

#### **ELTR 1210 | RESIDENTIAL WIRING II (30-30-3)**

This course provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include residential single family service calculations, residential two family service calculations, load balancing, sub panels and feeders, residential single family service installation, residential two family service installation, concepts of TV and CATV installation, swimming pool installation, and remote control of lighting and intercom installation.

**Prerequisite:** None

#### **ELTR 1220 | INDUSTRIAL PLCs (45-45-4)**

This course 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.

**Prerequisites:** ELTR 1110, ELTR 1180

#### **ELTR 1250 | DIAGNOSTIC TROUBLESHOOTING (9-63-2)**

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.

**Prerequisite:** None

#### **ELTR 1260 | TRANSFORMERS (33-36-3)**

This course provides instruction in the theory and operation of specific types of transformers. Emphasis will be placed on National Electrical Code requirements related to the use of transformers. Topics include transformer theory, types of transformers, National Electrical Code requirements, and safety precautions.

**Prerequisites:** None

#### **ELTR 1270 | N.E.C. INDUSTRIAL WIRING APPLICATIONS (30-60-4)**

This course provides instruction in industrial wiring applications of the National Electrical Code. Topics include rigid conduit installation; systems design concepts, equipment installation (600 volts or less) and safety precautions.

**Prerequisite:** None

#### **ELTR 1500 | ELECTRICAL SYSTEMS TECHNOLOGY INTERNSHIP/PRACTICUM (0-135-3)**

This course is designed to give students the opportunity to engage in a lab project or an off-site internship for the purpose of refining the skills necessary for gainful employment. The student is expected to have completed all program requirements to this point, and to be able to demonstrate efficiency in all skills mastered.

**Prerequisite:** Advisor Approval

#### **ELTR 1510 ELECTRICAL WORKER (15-60-3)**

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.

**Prerequisite:** None

#### **ELTR 1520 | GROUNDING AND BONDING (15-30-2)**

This course 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.

**Prerequisite:** None

#### **ELTR 1525 | PHOTOVOLTAIC SYSTEMS (45-60-5)**

This course introduces techniques and method on how to install residential and commercial photovoltaic systems.

**Prerequisite:** None

#### **ELTR 1530 | CONDUIT SIZING (15-45-2)**

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.

**Prerequisite:** Program Admission

#### **ELTR 1540 | WIRE PULLING AND CODES (15-75-3)**

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.

**Prerequisite:** None

## Job Acquisition Skills

### EMPL 1000 | INTERPERSONAL RELATIONS AND PROFESSIONAL DEVELOPMENT (30-0-2)

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.

**Prerequisite:** None

## Emergency Medical Services Professional

### EMSP 1010 | EMERGENCY MEDICAL RESPONDER (45-45-4)

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 and Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardiopulmonary 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.

**Prerequisite:** Program Admission

### EMSP 1110 | INTRODUCTION TO THE EMT PROFESSION (30-30-3)

This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the pre-hospital 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.

**Prerequisite:** Program Admission

**Corequisite:** None

### EMSP 1120 | EMT ASSESSMENT/AIRWAY MANAGEMENT AND PHARMACOLOGY (30-30-3)

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### EMSP 1130 | MEDICAL EMERGENCIES FOR THE EMT (30-30-3)

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### EMSP 1140 | SPECIAL PATIENT POPULATIONS (30-30-3)

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### EMSP 1150 | SHOCK AND TRAUMA FOR THE EMT (30-30-3)

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### EMSP 1160 | CLINICAL AND PRACTICAL APPLICATIONS FOR THE EMT (0-45-1)

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 1510 | ADVANCED CONCEPTS FOR THE AEMT (30-30-3)**

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 1520 | ADVANCED PATIENT CARE FOR THE AEMT (30-30-3)**

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.

**Prerequisite:** EMSP 1110, EMSP 1120, EMSP 1130, EMSP 1140, EMSP 1150, EMSP 1160, EMSP 1510

**Corequisite:** EMSP 1530, EMSP 1540

### **EMSP 1530 | CLINICAL APPLICATIONS FOR THE AEMT (0-30-1)**

This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 1540 | CLINICAL AND PRACTICAL APPLICATIONS FOR THE AEMT (0-90-3)**

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2110 | FOUNDATIONS OF PARAMEDICINE (30-30-3)**

This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on

the pre-hospital 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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2120 | APPLICATIONS OF PATHOPHYSIOLOGY FOR PARAMEDICS (45-0-3)**

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2130 | ADVANCED RESUSCITATIVE SKILLS FOR PARAMEDICS (30-30-3)**

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2140 | ADVANCED CARDIOVASCULAR CONCEPTS (45-30-4)**

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.

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2310 | THERAPEUTIC MODALITIES OF CARDIOVASCULAR CARE (30-30-3)**

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).

**Prerequisite:** Program Admission

**Corequisite:** None

### **EMSP 2320 | THERAPEUTIC MODALITIES OF MEDICAL CARE (60-31-5)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2330 | THERAPEUTIC MODALITIES OF TRAUMA CARE (45-30-4)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2340 | THERAPEUTIC MODALITIES FOR SPECIAL PATIENT POPULATIONS (45-30-4)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2510 | CLINICAL APPLICATIONS FOR THE PARAMEDIC I (0-90-2)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2520 | CLINICAL APPLICATIONS FOR THE PARAMEDIC II (0-90-2)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2530 | CLINICAL APPLICATIONS FOR THE PARAMEDIC III (0-90-2)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2540 | CLINICAL APPLICATIONS FOR THE PARAMEDIC IV (0-45-1)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2550 | CLINICAL APPLICATIONS FOR THE PARAMEDIC V (0-45-1)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2560 | CLINICAL APPLICATIONS FOR THE PARAMEDIC VI (0-45-1)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### **EMSP 2570 | CLINICAL APPLICATIONS FOR THE PARAMEDIC VII (0-45-1)**

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

### EMSP 2710 | FIELD INTERNSHIP FOR THE PARAMEDIC (0-90-2)

Provides supervised field internship experience in the pre-hospital advanced life support setting. Topics include: Field Internship.

**Prerequisite:** Program Admission  
**Corequisite:** None

### EMSP 2720 | PRACTICAL APPLICATIONS FOR THE PARAMEDIC (30-30-3)

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.

**Prerequisite:** Program Admission  
**Corequisite:** None

## English

### ENGL 0090 | LEARNING SUPPORT ENGLISH (45-30-3)

Emphasizes the rules of grammar, punctuation, capitalization, subject/verb agreement, correct verb forms, spelling, writing, and revising skills for basic paragraph development, fundamental reading competencies, vocabulary, comprehension skills, critical reading skills, study skills, and content area reading skills.

**Prerequisite:** None  
**Corequisite:** COLL 1500

### ENGL 0098 | ENGLISH III (45-0-3)

Emphasizes the ability to communicate using written methods. Topics include writing, grammar, and revising, vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills. Provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills.

**Prerequisite:** ENGL 0090 or appropriate English placement test score  
**Corequisite:** ENGL 1101

### ENGL 1010 | FUNDAMENTALS OF ENGLISH I (45-0-3)

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.

**Prerequisites:** ENGL 0090 or appropriate placement test score or appropriate placement test score.

### ENGL 1101 | COMPOSITION AND RHETORIC (45-0-3)

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.

**Prerequisite:** Appropriate Degree Level Writing (English) Placement Test Score and Appropriate Degree Level Reading Placement Test Score.

### ENGL 1102 | LITERATURE AND COMPOSITION (45-0-3)

Emphasizes the student's 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.

**Prerequisite:** ENGL 1101

### ENGL 1105 | WORKPLACE AND TECHNICAL COMMUNICATIONS (45-0-3)

*Effective Spring 2018 (201814)*

### ENGL 1105 | TECHNICAL COMMUNICATIONS (45-0-3)

*Prior to Spring 2018 (201814)*

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.

**Prerequisite:** ENGL 1101 with a grade of C or better

### ENGL 2130 | AMERICAN LITERATURE (45-0-3)

This course emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature which 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.

**Prerequisite:** ENGL 1101 with a grade of C or better

## Engineering Technology

### ENGT 1000 | INTRODUCTION TO ENGINEERING TECHNOLOGY (30-45-3)

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.

**Prerequisite:** Provisional Admission: Associate degree-level math placement scores

## Forensic Science

### FOSC 2037 | VICTIMOLOGY (45-0-3)

While individuals have been crime victims for many years, victimology or the study of crime victims is a relatively recent discipline. The majority of criminological research and discussion has been focused on the offender rather than the victim. This course provides an overview of the principles and concepts of victimology, an analysis of victimization patterns and trends, and the role of victimology in the justice system. In addition the repercussions of victimization, victim

reporting patterns and remedies available for victims are also explored.

**Prerequisite:** Program Admission

### **FOSC 2150 | CASE PREPARATION AND COURTROOM TESTIMONY (30-60-4)**

Examines the case file preparation, admissibility of evidence rulings, the criminal trial process, courtroom demeanor, and direct and cross examination techniques for courtroom testimony. Skills are performed in a mock courtroom setting by the students. Topics include fact and expert witnesses, pertinent case law, property and evidence reports, investigative and laboratory reports, preparation of the witness, witness credibility and proper courtroom appearance and demeanor.

**Prerequisite:** Program Admission

## **Gerontology**

### **GERT 1000 | UNDERSTANDING THE GERONTOLOGICAL CLIENT (30-0-2)**

This course provides a description of the aging client in the aging services network as well as an examination of sociological, psychological, and biological aspects of aging.

**Prerequisite:** Program Admission

### **GERT 1010 | AGING SERVICES ENVIRONMENT (30-0-2)**

This course provides a description of the aging services environment including federal, state, and local roles and responsibilities as well as an examination of service specifications.

**Prerequisite:** GERT 1000

### **GERT 1020 | BEHAVIORAL ASPECTS OF AGING (30-0-2)**

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.

**Prerequisite:** Program Admission

### **GERT 1030 | GERONTOLOGICAL NUTRITION (15-0-1)**

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.

**Prerequisite:** Program Admission

### **GERT 1040 | HEALTHY AGING (30-0-2)**

This course provides an examination of lifestyles conducive to healthy aging and considers the role of nutrition, exercise, safety, and lifelong learning.

**Prerequisite:** GERT 1000

### **GERT 1050 | PRINCIPLES OF HOME HEALTH CARE (45-0-3)**

This course provides discussion of the development of modern home care focusing on the elderly and the values of keeping families together in times of illness while maintaining a therapeutic environment.

**Prerequisite:** Program Admission

### **GERT 1060 | ALZHEIMER'S DISEASE AND DEMENTIA (45-0-3)**

This course provides an examination of Alzheimer's disease and other forms of dementia; the foundation for caregiving; and an emphasis on therapeutic techniques. This course involves experiential learning activities as well as didactic learning experiences.

**Prerequisite:** None

### **GERT 1070 | LEGAL AND ETHICAL ASPECTS OF AGING (45-0-3)**

This course provides an exploration of legal and ethical issues and the relationship to nursing care of the gerontological client; a review of laws which govern and protect the aging client as well as a review of moral principles and values that guide human behaviors.

**Prerequisite:** GERT 1000

### **GERT 1080 | DEATH AND DYING (30-0-2)**

This course provides an understanding of the death and dying process as a normal part of the life cycle and an examination of the specific care needed to care for the dying patient and family as they complete the last stage of growth and development.

**Prerequisite:** Program Admission

### **GERT 2000 | GERONTOLOGY PRACTICUM I (0-225-5)**

This course provides the student with the opportunity to gain experience in an actual clinical/job setting. Students will be placed in an appropriate facility throughout the semester. On-the-job training topics include: orientation to the profession; communication; roles and responsibilities of a Geriatric Specialist; legal and safety requirements in the field of gerontology; equipment use; and performance skills standards and procedures.

**Prerequisites:** GERT 1000, GERT 1010, GERT 1030

### **GERT 2010 | GERONTOLOGY PRACTICUM II (0-225-5)**

This course builds on the concepts presented in Gerontology Practicum I and develops the skills necessary for successful performance in the job market.

**Prerequisite:** GERT 2000

## **Geographic Information Systems**

### **GIFS 1101 | INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (30-60-4)**

This course is an introduction to the principles and applications of Geographic Information Systems and basic use of a hand-held Global Positioning System (GPS) unit in the field. Topics include: applications of geographic information including data structure, spatial analysis, data management, data visualization, and data retrieval. Emphasis is placed on the interdisciplinary nature of GIS and its relevance to industry and society. Students will also acquire skills in introduction to terminology, hardware, and technology used in GPS.

**Prerequisite:** Program Admission

**Corequisite:** COMP 1000

### **GIFS 1103 | INTERMEDIATE GIS (30-60-4)**

This GIS course prepares students for geographic analysis. The course introduces students to the use of software tools in geographic and database analysis and provides practical experience in the use of GIS software for spatial analysis.

**Prerequisite:** Program Admission

### **GIFS 1109 | SPECIAL TOPICS IN GIS (30-60-4)**

This course allows instructors to cover topics that are



specifically related to their service area. Examples of projects are: precision agriculture, fire and crime, water usage, historical data, and utility layouts. Students will be assigned a project that will benefit them in employment for their current service area.

**Prerequisite:** GIFS 1103

#### **GIFS 1114 | ADVANCED GIS: APPLICATION DEVELOPMENT (30-60-4)**

This course provides practical experience in designing a Geographic Information Systems model. Implementing a research design with spatial data, students sharpen their GIS technical and problem-solving skills. GIS models useful to the public and private sector are examined.

**Prerequisite:** GIFS 1103

#### **GIFS 1116 | SPATIAL ANALYSIS IN GIS (30-60-4)**

This course provides advanced concepts to spatial analysis. The course will briefly review methods used in analysis of geographically referenced data. The course will introduce sampling strategies for data used in GIS using raster and vector data structures. Introductory concepts in GIS raster based information including remote sensing techniques and methods are also discussed.

**Prerequisite:** GIFS 1103

#### **GIFS 1122 | GIS IN SCIENCE, BUSINESS, AND GOVERNMENT (30-60-4)**

This course includes an in-depth survey of the various ways that GIS applications are being used in natural resources, government (city, county, state, and federal) and business. Topics will include data acquisition, accuracy, analysis, and presentation techniques necessary for various GIS applications.

**Prerequisite:** GIFS 1103

#### **GIFS 1124 | CARTOGRAPHIC DESIGN FOR GIS (30-60-4)**

This course provides a comprehensive study of GIS applicable cartography including cartographic principles, data acquisition methods used in map production, and methods of base map development. Techniques used in GIS base map development are introduced using hands-on exercises.

**Prerequisite:** GIFS 1103

#### **GIFS 1126 | DATABASE DESIGN AND MANAGEMENT IN GIS (30-60-4)**

This course is an introduction to principles of database design and management including conversion fundamentals and modeling techniques. Topics include database integration concepts, development of user interface, troubleshooting databases, relational database concepts, and database design in GIS.

**Prerequisite:** GIFS 1103

#### **GIFS 2000 | GEOGRAPHIC INFORMATION SYSTEMS PRACTICUM/INTERNSHIP (0-135-3)**

This practicum course provides an approved industry-like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

**Prerequisite:** Advisor Approval

#### **GIFS 2010 | GEOGRAPHIC INFORMATION SYSTEMS INTERNSHIP/PRACTICUM (0-180-4)**

This practicum provides an approved industry like setting where the student develops and sharpens skills. Emphasis is

placed on production standards and achievement and quality control.

**Prerequisite:** Advisor Approval

#### **GIFS 2020 | GEOGRAPHIC INFORMATION SYSTEMS PRACTICUM/INTERNSHIP (0-270-6)**

This practicum course provides an approved industry like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

**Prerequisite:** Advisor Approval

#### **GIFS 2030 | GEOGRAPHIC INFORMATION SYSTEMS EXIT REVIEW (0-90-2)**

This course emphasizes student production of portfolio-quality pieces; focuses on the preparation for entry into the job market.

**Prerequisite:** None

## **Hemodialysis Technician**

#### **HECT 1100 | HEMODIALYSIS PATIENT CARE (75-60-7)**

This course will focus on the theoretical and clinical aspects of hemodialysis, including the duties and responsibilities essential to the delivery of patient care in the chronic outpatient setting.

**Prerequisites:** Program Admission

#### **HECT 1120 | HEMODIALYSIS PRACTICUM (30-90-4)**

This course will focus on the theoretical and clinical aspects of hemodialysis, including the duties and responsibilities essential to the delivery of patient care in the chronic outpatient setting.

**Prerequisite:** HECT 1100

#### **HECT 1130 | HEMODIALYSIS REUSE/REPROCESSING PRACTICUM (60-60-6)**

This course equips healthcare workers with the skills necessary to succeed in the field of hemodialysis as a reuse technician. Focus is on the clinical aspects of hemodialysis, including reprocessing of hemodialyzers and operating machines that clean and sterilize artificial kidneys or dialyzers used by dialysis patients after each patient treatment.

**Prerequisite:** HECT 1100

## **History**

#### **HIST 1111 | WORLD HISTORY I (45-0-3)**

This course 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.

**Prerequisite:** Appropriate Degree-Level English and Reading Placement Test Scores

#### **HIST 1112 | WORLD HISTORY II (45-0-3)**

This course 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.

**Prerequisite:** Appropriate Degree-Level English and Reading Placement Test Scores

### **HIST 2111 | U.S. HISTORY I (45-0-3)**

This course 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.

**Prerequisite:** Appropriate Degree Level English and Reading Placement Test Scores

### **HIST 2112 | U.S. HISTORY II (45-0-3)**

**Prerequisite:** Appropriate Degree Level English and Reading Placement Test Scores

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.

## **Hotel/Restaurant/Travel Management**

### **HRTM 1100 | INTRODUCTION TO HOTEL, RESTAURANT, AND TOURISM MANAGEMENT (45-0-3)**

This course provides the student with an overview of occupations in the hospitality industry. Emphasizes the various segments of each occupation and the interrelated responsibilities for customer service which exist across the hospitality industry. Topics include: development of the hospitality industry, food and beverage services, hotel services, meeting and convention services, management's role in the hospitality industry, and hospitality industry trends.

**Prerequisites:** Program Admission

### **HRTM 1105 | TOURISM IN GEORGIA (45-0-3)**

This course focuses on the ways tourism impacts the state of Georgia. Topics include regional, historical, cultural, and culinary tourism; how welcome centers and convention and visitors bureaus market the state; career opportunities within the tourism industry; and the variety of reasons tourists come to Georgia.

**Prerequisites:** None

### **HRTM 1110 | TRAVEL INDUSTRY AND TRAVEL GEOGRAPHY (45-0-3)**

Introduces students to the importance of the travel agent in the hospitality industry and provides an understanding of international, national, state, major cities and their points of interest to the travel customer. Emphasis is placed on career

options, industry trends, travel documents, identifying why people travel and how geography is linked to their needs. Topics include: terminology, agency operations, travel reference guides, airline industry, other transportation modes, hotels and resorts, individual travel needs, travel and tourism careers, miscellaneous services, geographical and physical aspects of the Americas and Greenland, Europe, Middle East and Africa, Far East, Australia, New Zealand and Pacific Islands, and travel regulations and documents needed to travel internationally.

**Prerequisite:** Program Admission

### **HRTM 1110 | TRAVEL INDUSTRY AND TRAVEL GEOGRAPHY - AMERICAS (45-0-3)**

*Effective Spring 2018 (201814)*

Introduces students to the importance of the travel agent in the hospitality industry and provides an understanding of international, national, state, major cities and their points of interest to the travel customer. Emphasis is placed on career options, industry trends, and travel documents, identifying why people travel and how geography is linked to their needs. Topics include: terminology, agency operations, travel reference guides, airline industry, other transportation modes, hotels and resorts, individual travel needs, travel and tourism careers, miscellaneous services, geographical and physical aspects of the Americas and travel regulations and documents needed to travel internationally.

**Prerequisite:** Program Admission

### **HRTM 1115 | TRAVEL INDUSTRY AND TRAVEL GEOGRAPHY - INTERNATIONAL (45-0-3)**

*Effective Spring 2018 (201814)*

Introduces students to the importance of the travel agent in the hospitality industry and provides an understanding of international, national, state, major cities and their points of interest to the travel customer. Emphasis is placed on career options, industry trends, and travel documents, identifying why people travel and how geography is linked to their needs. Topics include: terminology, agency operations, travel reference guides, airline industry, other transportation modes, hotels and resorts, individual travel needs, travel and tourism careers, miscellaneous services, geographical and physical aspects of the Americas and Greenland, Europe, Middle East and Africa, Far East, Australia, New Zealand and Pacific Islands, and travel regulations and documents needed to travel internationally.

**Prerequisite:** Program Admission

### **HRTM 1120 | TOUR AND CRUISE MANAGEMENT (45-0-3)**

This course provides students with an orientation to the duties and responsibilities of the tour operator and an overview of the cruise industry. The course also gives students an opportunity to gain the technical knowledge and skills needed to utilize computerized reservation and information systems. Emphasis is placed on the operator's role in planning and conducting tours and cruises as well as accessing data bases and identifying options which satisfy customer's needs. Topics include planning individual tours, planning group tours, transportation arrangements, accommodation options, entertainment options, foreign country tours, and manager's on-tour responsibilities on the ship, living quarters, amenities, shipboard activities and marketing, selling of cruises, agency computer hardware, computer reservation systems, automated travel information, back-room accounting, and trends in automated travel data systems.

**Prerequisite:** Program Admission

### **HRTM 1130 | BUSINESS ETIQUETTE AND COMMUNICATION (45-0-3)**

This course focuses on professionalism in a variety of business settings. Topics include professional image and conduct at work, telephone etiquette, table manners, oral and written communication skills, and diversity in the hospitality industry.

**Prerequisite:** Program Admission

### **HRTM 1140 | HOTEL OPERATIONS MANAGEMENT (45-0-3)**

This course focuses on the organization and management of lodging operations. It covers day-to-day operations of each department in a hotel and helps students to understand what seasoned managers do. Emphasis is placed on the rooms division. Topics include corporate structures, departmental responsibilities, hotel services and staff, decision making, and industry trends.

**Prerequisite:** Program Admission

### **HRTM 1150 | EVENT PLANNING (45-0-3)**

This course introduces students to event planning requirements. Topics include fundamentals of event planning; selecting event dates and venues; developing agendas, time lines, budgets, and contracts; marketing events, and facilitating events.

**Prerequisite:** Program Admission

### **HRTM 1160 | FOOD AND BEVERAGE MANAGEMENT (45-0-3)**

This course provides students with a study of food and beverage operations and management. Emphasis is placed on the successful operation of a food and beverage establishment. Topics include restaurants, owners, locations, and concepts; business plans, financing, and legal and tax matters; menus, kitchens, and purchasing; restaurant operations and management.

**Prerequisite:** Program Admission

### **HRTM 1170 | HOSPITALITY, INDUSTRY ACCOUNTING AND FINANCIAL ANALYSIS (45-0-3)**

This course provides students with the fundamental knowledge to interpret and analyze the key reports and financial statements used daily in the hospitality industry. Focusing on profit and loss statements, students learn to use numbers to assess the performance of individual departments and the overall operation. These numbers are the basis for managerial decisions that increase revenue and control costs.

**Prerequisite:** Program Admission

### **HRTM 1201 | HOSPITALITY MARKETING (45-0-3)**

Introduces students to marketing techniques associated with hotel/restaurant/tourism fields with emphasis on identifying and satisfying needs of customers. Topics include: marketing introduction, research and analysis, marketing strategies, marketing plans, social media marketing, branding, positioning, sales and advertising. Because of the constant change in marketing strategies in the hospitality industry, this course will also focus on new marketing techniques that are being used in the hospitality industry.

**Prerequisite:** Program Admission

### **HRTM 1210 | HOSPITALITY LAW (45-0-3)**

This course introduces the student to local, state, federal, and international laws which govern the hospitality industry. Emphasis is placed on creating a workplace where compliance with the law, adherence to ethical standards, and stressing security and loss prevention are the basis for every decision. Topics include civil law, the structure of hospitality enterprises, government agencies that impact the hospitality

industry, preventative legal management, contracts, employee selection and management, duties and obligations to employees and guests, and crisis management.

**Prerequisite:** Program Admission

### **HRTM 1220 | SUPERVISION AND LEADERSHIP IN THE HOSPITALITY INDUSTRY (45-0-3)**

This course focuses on the principles of good supervision and leadership as they apply to day-to-day hospitality operations. Topics include recruiting, selection, orientation, compensation and benefits, motivation, teamwork, coaching, employee training and development, performance standards, discipline, employee assistance programs, health and safety, conflict management, communicating and delegating, and decision making and control.

**Prerequisite:** Program Admission

### **HRTM 1230 | INTERNSHIP (0-135-3)**

*Effective Spring 2018 (201814)*

This course introduces students to the application and reinforcement of hotel/restaurant/travel operational principles in an actual job placement or practicum experience. Students become acquainted with occupational responsibilities through realistic work situations and are provided with insights into management applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of hotel/restaurant/travel management techniques, and professional development. The occupation-based instruction includes written individualized training plans and written performance evaluations.

**Prerequisite:** HRTM 1100

*Prior to Spring 2018 (201814)*

This course introduces students to the application and reinforcement of hotel/restaurant/travel operational principles, in an actual job placement or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into management applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of hotel/restaurant/travel management techniques, and professional development. The occupation-based instruction is implemented through the use of a practicum or internship and all of the following: written individualized training plans, written performance evaluation.

**Prerequisite:** HRTM 1100

## **Humanities**

### **HUMN 1101 | INTRODUCTION TO HUMANITIES (45-0-3)**

Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature in the early, middle, and modern periods. The humanities provide insight into people and society in both the Western and non-Western world. Topics include historical and cultural developments, contributions of the humanities, and research.

**Prerequisite:** ENGL 1101

## **Instrumentation & Control**

### **ICET 2040 | FUNDAMENTALS OF PRESSURE, TEMPERATURE, FLOW, AND LEVEL (60-30-5)**

An introduction to the concepts of pressure, level,

flow, and temperature calculations and conversions; operating principles of indicators, recorders, transmitters, and transducers; measure pressure, level, flow, and temperature using various indicators and recorders; develop troubleshooting techniques for various devices.

**Prerequisite:** None

### ICET 2060 | INSTRUMENTATION MAINTENANCE AND CALIBRATION (45-75-5)

This course introduces methodology into maintenance procedures for various process control systems that will include preventive and predictive methodologies. This course also provides an in-depth study of calibration theory, procedures, and techniques using diverse associated test equipment.

**Prerequisite:** ICET 2040

### ICET 2080 | FINAL CONTROL ELEMENTS (30-75-4)

This course includes principles of operation, calibration, servicing, troubleshooting, repair and replacement of actuators/control valves.

**Prerequisite:** IDSY 2800

## Industrial Fundamentals

### IDFC 1007 | INDUSTRIAL SAFETY PROCEDURES (15-30-2)

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.

**Prerequisite:** None

### IDFC 1011 | DIRECT CURRENT I (30-30-3)

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.

**Prerequisite:** None

**Corequisite:** MATH 1012

### IDFC 1012 | ALTERNATING CURRENT I (30-30-3)

This course 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.

**Prerequisite:** None

**Corequisite:** IDFC 1011

### IDFC 1013 | SOLID STATE DEVICES I (30-30-3)

Introduces the physical characteristics and applications of solid state devices. Topics include introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

**Prerequisite:** IDFC 1000 or IDSY 1101, IDFC 1012 or IDSY 1105

## Industrial Systems

### IDSY 1011 | Industrial Computer Applications (3)

This course provides a foundation in industrial computers

and computer systems with a focus in linking computers to the plant floor process. Topics include: hardware, software, boot sequence, configuration, troubleshooting, and communications platforms.

**Prerequisites:** None

**Corequisites:** None

### IDSY 1020 | PRINT READING AND PROBLEM SOLVING (30-45-3)

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.

**Prerequisite:** Program admission

### IDSY 1101 | DC CIRCUIT ANALYSIS (30-30-3)

This course introduces direct current (DC) concepts and applications. Topics include electrical principles and laws, batteries, DC test equipment, Series, parallel, simple combination circuits, laboratory procedures and safety practices.

**Prerequisite:** None

### IDSY 1105 | AC CIRCUIT ANALYSIS (30-30-3)

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.

**Prerequisite:** None

### IDSY 1110 | INDUSTRIAL MOTOR CONTROLS I (30-75-4)

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 motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

**Prerequisite:** None

### IDSY 1120 | BASIC INDUSTRIAL PLCs (15-105-4)

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.

**Prerequisite:** None

### IDSY 1130 | INDUSTRIAL WIRING (30-75-4)

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.

**Prerequisite:** None

### IDSY 1150 | DC AND AC MOTORS (30-30-3)

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.

Prerequisite: None

#### **IDSY 1160 | MECHANICAL LAWS AND PRINCIPLES (45-45-4)**

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.

Prerequisite: None

#### **IDSY 1170 | INDUSTRIAL MECHANICS (15-105-4)**

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.

Prerequisite: None

#### **IDSY 1180 | MAGNETIC STARTERS AND BRAKING (15-60-3)**

This course 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.

Prerequisite: None

#### **IDSY 1190 | FLUID POWER SYSTEMS (30-75-4)**

This course provides instruction in the fundamentals of safely operating hydraulic and pneumatic systems. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components and pneumatic system principles and components.

Prerequisite: None

#### **IDSY 1195 | PUMPS AND PIPING SYSTEMS (15-60-3)**

This course provides instructions in the fundamentals concepts of industrial pumps and piping systems. Topics include pump identification, pump operation, installation, maintenance and troubleshooting, piping systems and installation of piping systems.

Prerequisites: None

#### **IDSY 1210 | INDUSTRIAL MOTOR CONTROLS II (30-105-4)**

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.

Prerequisite: IDSY 1110

#### **IDSY 1220 | INTERMEDIATE INDUSTRIAL PLCs (15-105-4)**

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, introduction to HMI, analog control, and troubleshooting discrete IO devices.

Prerequisite: None

#### **IDSY 1230 | INDUSTRIAL INSTRUMENTATION (30-90-4)**

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.

Prerequisite: None

#### **IDSY 1240 | MAINTENANCE FOR RELIABILITY (45-45-4)**

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.

Prerequisite: None

#### **IDSY 1260 | MACHINE TOOL FOR INDUSTRIAL REPAIRS (30-75-4)**

Provides Industrial Mechanics the basic machine shop skills to perform common mechanical repairs such as: repair of scored pump shafts, motor shafts, conveyor shafts or valve stems; repair or fabrication of support brackets; fabrication of simple shaped (cylindrical or rectangular) parts; making or repairing keyseats and keys.

Prerequisite: None

#### **IDSY 1310 | INDUSTRIAL SYSTEMS REVIEW (30-45-3)**

This course provides an instructional review of the Industrial Maintenance Technology course of study with a comprehensive assessment of each area. The assessment will consist of a written, identification, and hands-on examination. Topics include direct current, alternating current, industrial wiring, AC-DC motors, motor controls, industrial hydraulics, industrial pneumatics, industrial mechanics, welding, safety, and programmable logic controllers.

Prerequisite: Program Admission

#### **IDSY 2750 | HUMAN MACHINE INTERFACE (30-75-4)**

Provides hand-on development of Programming skills for industrial HMI components used automated industrial systems. Emphasis is placed on applying skills developed in previous courses in programmable logic controls (PLCs) in an industrial setting. This course includes advanced skills and techniques the student can apply to HMI applications in an industrial environment.

Prerequisite: None

#### **IDSY 2800 | ADVANCED PROCESS CONTROL (30-75-4)**

Teaches advanced process control skills to include Process control drawings, PID control, advanced loops and tuning, Process controllers, DCS systems, and SCADA systems. The student will be introduced to the fundamentals, devices and methods use in today's advanced process systems.

Prerequisite: None

#### **IDSY 2830 | NETWORKING INDUSTRIAL EQUIPMENT (30-75-4)**

Provides communication and networking skills needed for cabling and connection to PLC/HMI Devices.

**Prerequisite:** None

### **IDSY 2850 | INDUSTRIAL GRAPHICAL COMMUNICATION (30-75-4)**

Provides hands on experience in the development and implementation of graphical computer based HMI (Human-Machine Interfaces) for control of automated machines and industrial manufacturing systems. This course is built on the user's knowledge/familiarity of programmable logic controls (PLCs) and demonstrates the capabilities and economic impact of PC based controls systems. The manufacturing industry's demand for low cost automated solutions has pushed the desktop PC into the plant floor. Areas such as front end creation, I/O assignments and communications, alarming, and acknowledgement, data trending and more are covered and explored throughout the course.

**Prerequisite:** None

## **Logistics**

### **LOGI 1000 | BUSINESS LOGISTICS (45-0-3)**

This course provides a general knowledge of current management practices in logistics management. The focuses of the course will be on planning, organizing, and controlling of these activities, key elements for successful management in any organization. The course will also introduce student to Transport, Inventory, and Location strategies, Customer Service Goals and Organization and Control.

**Prerequisite:** Program Admission

### **LOGI 1010 | PURCHASING (45-0-3)**

Provides a general knowledge of purchasing for today's Supply Chains. The student will be introduced to Cross-functional teaming, Purchasing and Supply Performance, Supplier Integration into new Product Development, Supplier Development, Strategic Cost Management and Total Ownership Cost (TOC), and many other topics. This course along with other Supply Chain based courses will give the student the foundation needed to make a difference in obtaining low costs, quality products for their organizations.

**Prerequisite:** None

### **LOGI 1020 | MATERIALS MANAGEMENT (45-0-3)**

This course will introduce students to materials Management by learning the planning production process, master scheduling, material requirements, and forecasting material demands and inventory levels. This course is designed to build on the students' knowledge of supply chains and how effective material management improves supply chain performance.

**Prerequisite:** None

### **LOGI 1030 | PRODUCT LIFECYCLE MANAGEMENT (45-0-3)**

The core of product lifecycle management is the creation, preservation and storage of data relating to an organizations products and activities to ensure it's available for daily operations. Students will learn that effective product lifecycle management is an essential tool for coping with the demanding global competition and ever-shortening product and component life cycles.

**Prerequisite:** None

## **Medical Assisting**

### **MAST 1010 | LEGAL AND ETHICAL CONCERNS IN THE**

### **MEDICAL OFFICE (30-0-2)**

This course 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.

**Prerequisite:** Program Admission

### **MAST 1030 | PHARMACOLOGY IN THE MEDICAL OFFICE (60-0-4)**

This course 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.

**Prerequisite:** Program Admission, MATH 1012

### **MAST 1060 | MEDICAL OFFICE PROCEDURES (45-30-4)**

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, and professional communication.

**Prerequisite:** Program Admission

### **MAST 1080 | MEDICAL ASSISTING SKILLS I (15-120-4)**

This course 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 and electrocardiography.

**Prerequisites:** Program Admission, ALHS 1011, ALHS 1090

### **MAST 1090 | MEDICAL ASSISTING SKILLS II (15-120-4)**

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; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; respiratory evaluations; principles of IV administration; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records.

**Prerequisites:** Program Admission, ALHS 1011, ALHS 1090

### **MAST 1100 | MEDICAL INSURANCE MANAGEMENT (15-45-2)**

Emphasizes essential skills required for the medical practice. Topics include: managed care, reimbursement, and coding.

**Prerequisites:** Program Admission, ALHS 1011, ALHS 1090, COMP 1000, ENGL 1010

### **MAST 1110 | ADMINISTRATIVE PRACTICE MANAGEMENT (15-75-3)**

Emphasizes essential skills required for the medical practice

in the areas of computers and medical transcription. Topics include: medical transcription/electronic health records; application of computer skills; integration of medical terminology; accounting procedures; and application of software.

**Prerequisites:** Program Admission, ALHS 1011, ALHS 1090, COMP 1000, ENGL 1010

### **MAST 1120 | HUMAN DISEASES (45-0-3)**

This course provides 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: introduction to disease and diseases of body systems.

**Prerequisites:** ALHS 1011, ALHS 1090

### **MAST 1170 | MEDICAL ASSISTING EXTERNSHIP (0-270-6)**

This course 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.

**Prerequisites:** Advisor Approval

### **MAST 1180 | MEDICAL ASSISTING SEMINAR (45-0-3)**

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.

**Prerequisites:** Advisor Approval

### **MAST 1510 | MEDICAL BILLING AND CODING I (15-30-2)**

This course 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.

**Prerequisites:** ALHS 1011, ALHS 1090, ENGL 1010

### **MAST 1520 | MEDICAL BILLING AND CODING II (15-60-3)**

This course is a continuance of MAST 1510 Medical Billing and Coding I. MAST 1520 topics include: medical records coding techniques; coding linkage and compliance; third-party reimbursement issues; and ethics in coding including fraud and abuse.

**Prerequisites:** MAST 1510

**Corequisite:** MAST 1530

### **MAST 1530 | MEDICAL PROCEDURAL CODING (15-30-2)**

This course provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physicians Current Procedural Terminology (CPT) manual. Topics include: format of CPT manual, CPT manual coding guidelines, and coding using the CPT manual.

**Prerequisites:** MAST 1510

**Corequisite:** MAST 1520

## **Mathematics**

### **MATH 0090 | LEARNING SUPPORT MATH (45-30-3)**

Emphasizes in-depth arithmetic skills. Topics include number theory, whole numbers, fractions, decimals, percentages, ratio/proportion, measurement, geometry, application problems, introduction to real numbers, and applications involving previously listed topics.

**Prerequisite:** None

**Corequisite:** COLL 1500

### **MATH 0098 | ELEMENTARY ALGEBRA (45-0-3)**

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.

**Prerequisite:** MATH 0090 or appropriate arithmetic or algebra placement test score

### **MATH 0099 | INTERMEDIATE ALGEBRA (45-0-3)**

Emphasizes intermediate algebra skills. Topics include factoring, inequalities, rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

**Prerequisite:** MATH 0098 or appropriate algebra placement test score

**Corequisite:** MATH 1111

### **MATH 1011 | BUSINESS MATH (45-0-3)**

Emphasizes mathematical concepts found in business situations. Topics include basic mathematical skills, mathematical skills in business related problem solving, mathematical information for documents, graphs, and mathematical problems.

**Prerequisite:** MATH 0090 or Appropriate Arithmetic Placement Test Score

### **MATH 1012 | FOUNDATIONS OF MATHEMATICS (45-0-3)**

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, geometric concepts, technical applications, and basic statistics.

**Prerequisite:** MATH 0090 or Appropriate Arithmetic Placement Test Score

### **MATH 1013 | ALGEBRAIC CONCEPTS (45-0-3)**

Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

**Prerequisite:** MATH 0098 or Appropriate Algebra Placement Test Score

### **MATH 1015 | GEOMETRY AND TRIGONOMETRY (45-0-3)**

Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

**Prerequisite:** MATH 1013 with a grade of C or better

### **MATH 1017 | TRIGONOMETRY (45-0-3)**

Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

**Prerequisite:** MATH 1013 with a grade of C or better

### **MATH 1101 | MATHEMATICAL MODELING (45-0-3)**

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.

**Prerequisite:** Appropriate Algebra Placement Test Score

### **MATH 1103 | QUANTITATIVE SKILLS AND REASONING (45-0-3)**

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.

**Prerequisite:** Appropriate Algebra Placement Test Score

### **MATH 1111 | COLLEGE ALGEBRA (45-0-3)**

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.

**Prerequisite:** Appropriate Algebra Placement Test Score

### **MATH 1112 | COLLEGE TRIGONOMETRY (45-0-3)**

This course 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.

**Prerequisite:** MATH 1111 with a grade of C or better

### **MATH 1113 | PRECALCULUS (45-0-3)**

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.

**Prerequisite:** Regular Admission and MATH 1111 with a grade of C or better OR appropriate math placement score

### **MATH 1127 | INTRODUCTION TO STATISTICS (45-0-3)**

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.

**Prerequisite:** Appropriate Algebra Placement Test Score

### **MATH 1131 | CALCULUS I (60-0-4)**

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.

**Prerequisite:** MATH 1113 with a grade of C or better OR appropriate math placement score

### **MATH 1132 | CALCULUS II (60-0-4)**

This course includes the study of techniques of integration, application of the definite integral, an introduction to differential equations, improper integrals, sequences, and series.

**Prerequisite:** MATH 1131 with a grade of C or better OR appropriate math placement score

## **Machine Tool**

### **MCHT 1011 | INTRODUCTION TO MACHINE TOOL (30-60-4)**

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.

**Prerequisite:** None

### **MCHT 1012 | PRINT READING FOR MACHINE TOOL (45-0-3)**

*Effective Fall 2018 (201812)*

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.

**Prerequisite:** None

### **MCHT 1012 | BLUEPRINT FOR MACHNE TOOL (45-0-3)**

*Prior to Fall 2018 (201812)*

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.

**Prerequisite:** None

### **MCHT 1013 MACHINE TOOL MATH (30-45-3)**

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.

**Prerequisite:** None

### **MCHT 1020 | HEAT TREATMENT AND SURFACE GRINDING (30-60-4)**

*Effective Fall 2018 (201812)*

This course provides instruction in the setup, 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.

**Prerequisite:** None



**MCHT 1020 | HEAT TREATMENT AND SURFACE GRINDING (30-45-3)***Prior to Fall 2018 (201812)*

This course provides instruction in the setup, 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.

**Prerequisite:** None**MCHT 1030 | APPLIED MEASUREMENT (45-0-3)**

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.

**Prerequisite:** None**Corequisite:** MCHT 1011, MCHT 1013**MCHT 1119 | LATHE OPERATIONS I (30-60-4)***Effective Fall 2018 (201812)*

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.

**Prerequisite:** None**MCHT 1119 | LATHE OPERATIONS I (15-90-3)***Prior to Fall 2018 (201812)*

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.

**Prerequisite:** None**MCHT 1120 | MILL OPERATIONS I (30-60-4)***Effective Fall 2018 (201812)*

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

**Prerequisite:** None**MCHT 1120 | MILL OPERATIONS I (15-90-3)***Prior to Fall 2018 (201812)*

Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

**Prerequisite:** None**MCHT 1219 | LATHE OPERATIONS II (30-60-4)***Effective Fall 2018 (201812)*

This course provides further instruction for students to develop skill in the use of lathes. Topics include lathes, lathe setup, lathe operations, and safety.

**Prerequisite:** MCHT 1119**MCHT 1219 | LATHE OPERATIONS II (15-90-3)***Prior to Fall 2018 (201812)*

This course provides further instruction for students to develop skill in the use of lathes. Topics include lathes, lathe

setup, lathe operations, and safety.

**Prerequisite:** MCHT 1119**MCHT 1220 | MILL OPERATIONS II (30-60-4)***Effective Fall 2018 (201812)*

This course 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.

**Prerequisite:** MCHT 1120**MCHT 1220 | MILL OPERATIONS II (15-90-3)***Prior to Fall 2018 (201812)*

This course 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.

**Prerequisite:** MCHT 1120**Mechanical Engineering****MEGT 1010 | MANUFACTURING PROCESSES (30-30-3)**

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.

**Prerequisite:** Program Admission**Corequisite:** ENGT 1000**MEGT 1321 | MACHINING AND WELDING (15-45-2)**

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.

**Prerequisite:** Program Admission**Corequisite:** MEGT 1010**MEGT 2030 | STATICS (45-0-3)**

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.

**Prerequisite:** ENGT 1000, MATH 1113**MEGT 2080 | STRENGTH OF MATERIALS (45-45-4)**

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.

Prerequisite: MEGT 2030

## Metrology

### METR 1101 | INTRODUCTION TO QUALITY, STANDARDS, AND ISO 9000 (45-0-3)

Outlines the history of national and international quality standards. This course emphasizes ISO-9000 and QS-9000 standards; costs and benefits of registration; implementation and upkeep; registrar selection. The registrar accreditation, auditor certification, and company registration will be discussed in detail. also covers the AC and DC standards used in a Standards laboratory. The applications of these standards that pertain to measurements will be emphasized. Multifunction calibrators and digital multimeters will also be covered.

Prerequisite: None

### METR 1111 | INTRODUCTION TO MEASURE STANDARDS AND TECHNOLOGY (15-60-3)

This course provides instruction in principles and concepts of measurement technology. Includes various levels of Metrology, terminology, and definitions of common Metrology terms. Also covers units of measurement, metric, linear, motion, force, temperature, fluid, and electronic measurements.

Prerequisite: None

### METR 1132 | MECHANICAL MEASUREMENTS (15-60-3)

Fundamentals of measuring and measurement devices in mechanical measurements. Instrument characteristics, data and error analysis, and calibration will be covered. Experiments with basic instrumentation applied to measurements of force, strain, velocity, acceleration, temperature, pressure, and flow rates will be explored.

Prerequisite: METR 1111

### METR 1141 | QUALITY CONTROL AND STATISTICS (45-0-3)

This course is an in-depth study of statistical quality control as it pertains to the measurements arena. Statistical analysis is utilized to determine uncertainties, control charts, and dealing with variables.

Prerequisite: METR 1132

### METR 1161 | PHYSICAL METROLOGY (15-60-3)

This course is an in-depth study of temperature, humidity, pressure, vacuum, weight and measures, flow, and related measurements. Various types of measuring instruments and standards will be evaluated for care, use, calibration, and traceability.

Prerequisite: PHYS 1111

### METR 1163 | DIMENSIONAL METROLOGY (25-70-4)

This course is an introduction to theories, laws, and applications dealing with linear and angular measurements;

dimensional measurement principles and other measuring disciplines. Various types of dimensional measuring instruments and standards will be evaluated for care, calibration, and traceability.

Prerequisite: PHYS 1111

### METR 2111 | ELECTRONIC MEASURING INSTRUMENTS (15-112-4)

The Electronic Measuring Instruments course covers the measurement theories of voltage, current, resistance, capacitance, inductance, frequency and other electronic parameters. Topics include use of voltmeters, ammeters, ohmmeters, signal sources, oscilloscopes, electronic counters, power supplies, spectrum analyzers, logic analyzers, network analyzers, and logic analyzers to make electrical measurements.

Prerequisite: METR 1132

### METR 2121 | MODERN COMMUNICATIONS SYSTEMS (15-72-3)

This course provides instruction in principles and concepts of modern electronics communication. Topics include basic electronic communication technology, transmission and reception, amplitude modulation, frequency modulation, bandwidth, noise suppression, and introduces digital technology with wired and wireless digital communication.

Prerequisite: METR 1132

### METR 2131 | RF AND MICROWAVE TECHNOLOGY (15-72-3)

This course covers electronic communications components at RF and microwave frequencies. Topics include measuring, mathematical calibration, and troubleshooting procedures. Addresses transmitter/reception and modulating devices, antennas, interconnection systems, fiber optics, waveguides, radar, lasers, satellite transceiving devices, and digital/wireless communications configurations.

Prerequisite: METR 1132

### METR 2211 | INTRODUCTION TO AUTOMATED METROLOGY (15-60-3)

This course covers the proper use and ability to program automated test instruments by string command. Hewlett Packard SCPE commands using HP Basic and MET/CAL software packages. This course also covers laboratory managed software like CMI's Benchtop and MET/CAL.

Prerequisite: METR 2111, METR 2121, METR 2131

## Business Management

### MGMT 1100 | PRINCIPLES OF MANAGEMENT (45-0-3)

This course 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.

Prerequisite: None

### MGMT 1105 | ORGANIZATIONAL BEHAVIOR (45-0-3)

This course 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.

**Prerequisite:** None

### **MGMT 1110 | EMPLOYMENT RULES AND REGULATIONS (45-0-3)**

This course 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.

**Prerequisite:** None

### **MGMT 1115 | LEADERSHIP (45-0-3)**

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.

**Prerequisite:** None

### **MGMT 1120 | INTRODUCTION TO BUSINESS (45-0-3)**

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.

**Prerequisite:** None

### **MGMT 1125 | BUSINESS ETHICS (45-0-3)**

This course provides students with an overview of business ethics and ethical management practices with emphasis on the process of ethical decision-making and working through contemporary ethical dilemmas faced by business organizations, managers and employees. The course is intended to demonstrate to the students how ethics can be integrated into strategic business decisions and can be applied to their own careers. The course uses a case study approach to encourage the student in developing analytical, problem-solving, critical thinking and decision-making skills. Topics include: An overview of business ethics; moral development and moral reasoning; personal values, rights, and responsibilities; frameworks for ethical decision-making in business; justice and economic distribution; corporations and social responsibility; corporate codes of ethics and effective ethics programs; business and society: consumers and the environment; ethical issues in the workplace; business ethics in a global and multicultural environment; business ethics in cyberspace; and business ethics and the rule of law.

**Prerequisite:** None

### **MGMT 1135 | MANAGERIAL ACCOUNTING AND FINANCE (45-0-3)**

The focus of this course is to acquire the skills and concepts necessary to use accounting information in managerial decision making. Course is designed for those who will use,

not necessarily prepare, accounting information. Those applications include the use of information for short and long term planning, operational control, investment decisions, cost and pricing products and services. An overview of financial accounting and basic concepts of finance provides an overview of financial statement analysis.

**Prerequisite:** Program Admission

### **MGMT 2115 | HUMAN RESOURCE MANAGEMENT (45-0-3)**

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.

**Prerequisite:** None

### **MGMT 2120 | LABOR MANAGEMENT RELATIONS (45-0-3)**

This course 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 nonunion 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.

**Prerequisite:** None

### **MGMT 2125 | PERFORMANCE MANAGEMENT (45-0-3)**

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.

**Prerequisite:** None

### **MGMT 2130 | EMPLOYEE TRAINING AND DEVELOPMENT (45-0-3)**

This course 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.

**Prerequisite:** None

#### **MGMT 2135 | MANAGEMENT COMMUNICATION TECHNIQUES (45-0-3)**

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.

**Prerequisite:** None  
**Corequisite:** COMP 1000

#### **MGMT 2140 | RETAIL MANAGEMENT (45-0-3)**

This course develops a working knowledge of managing a retail business from a variety of perspectives with an emphasis on store management. The emphasis is on contemporary issues in retailing, particularly the process of supervising customer service and dealing with the changing demographics of retailing. An application focus on the use of information technologies, the internet, and electronic retailing is intended to give the student hands-on experience in retail management. Topics include: strategic retail management; store, non-store, and nontraditional retailing; retail human resource management; developing a customer-focused service strategy; managing customer service; retail operations and financial management; merchandise management; buying and inventory management; global, cataloging, and electronic retail management, information technology applications in retailing.

**Prerequisite:** None

#### **MGMT 2145 | BUSINESS PLAN DEVELOPMENT (45-0-3)**

Provides students with knowledge and skills necessary for a manager or entrepreneur to develop and implement a business plan. Topics include: business/community compatibility, introduction to cash flow and break even analysis, development of product/service idea, determination of market feasibility, determination of financial feasibility, development of marketing strategy, development of operations outline, and application of financial concepts.

**Prerequisite:** None

#### **MGMT 2150 | SMALL BUSINESS MANAGEMENT (45-0-3)**

This course introduces the essentials of starting, managing, and growing a small business. Topics include: the role of the entrepreneur, pricing, advertising, financing, and layout of facilities, inventory control, staffing, purchasing, vendor selection, and relevant laws affecting small business.

**Prerequisite:** None

#### **MGMT 2200 | PRODUCTION/OPERATION MANAGEMENT (45-0-3)**

This course provides the student with an intensive study of the overall field of production/operations management. Topics include role of production management/production managers, operational design, capacity planning, aggregate planning, inventory management, project management, and quality control/assurance.

**Prerequisite:** None

#### **MGMT 2205 | SERVICE SECTOR MANAGEMENT (45-0-3)**

This course focuses on supervision in the service sector with special emphasis on team building, quality management, and developing a customer focus. The challenge of providing world-class customer service is addressed through sections on principles of service industry supervision, career development, problem solving, stress management, and conflict resolution. Topics include: principles of service industry supervision, team building, customer service operations, TQM in a service environment, business software applications, communication in the service sector, introduction to information systems, selling principles and sales management, retail management, and legal issues in the service sector.

**Prerequisite:** None

#### **MGMT 2210 | PROJECT MANAGEMENT (45-0-3)**

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 project team and other organizations; critical path methodology; and total quality management.

**Prerequisite:** None

#### **MGMT 2215 TEAM PROJECT (45-0-3)**

This course utilizes team methodologies to study the field of management. It encourages students to discuss their perception of management practices which have been studied during the management program. Topics include: current issues and problems in management and supervision and state-of-the-art management and leadership techniques. Students will be put into teams, will work on team projects to demonstrate their understanding of the competencies of this course, and will do peer evaluation. Potential team projects could include authoring a management book covering the competencies, videos, web sites, bulletin boards, and slide presentations amongst others.

**Prerequisite:** Program Admission

#### **MGMT 2220 | MANAGEMENT AND SUPERVISION OCCUPATION-BASED INSTRUCTION (0-135-3)**

Reinforcement of management, supervision, and employability principles in an actual job placement or through a practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into management and supervisory applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of management and supervisory techniques, and professional development. The occupation-based instruction is implemented through the use of a practicum or internship and all of the following: written individualized training plans, written performance evaluation, and a required weekly seminar.

Prerequisite: None

### **MGMT 2500 | INTERNATIONAL BUSINESS PRINCIPLES (45-0-3)**

This course provides an opportunity to explore the international business environment and how to make effective business decisions in a global market. Topics include ethics and politics of international business, identification of risks which influence international business decisions, and analyzing the import/export process. Course may be scheduled during summer semester as a study abroad in Scotland.

**Prerequisite:** Program Admission

## **Marketing**

### **MKTG 1100 | PRINCIPLES OF MARKETING (45-0-3)**

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; knowledge of marketing principles; marketing strategy; and marketing career paths.

**Prerequisite:** None

### **MKTG 1130 | BUSINESS REGULATIONS AND COMPLIANCE (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 1160 | PROFESSIONAL SELLING (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 1162 CUSTOMER CONTACT SKILLS (45-30-4)**

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 for effective communication 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.

**Prerequisite:** Program Admission

### **MKTG 1190 | INTEGRATED MARKETING COMMUNICATIONS (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 1210 | SERVICES MARKETING (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 1270 | VISUAL MERCHANDISING (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 1280 | INTRODUCTION TO SPORTS AND RECREATION MANAGEMENT (45-0-3)**

This course introduces the sociological, philosophical, economic, and historical aspects of the sports and recreation industry. Topics include: nature of sports and recreation management, sports management landscape, research and trends, programming in sports and recreation management, employee training, evaluation and relations, fiscal topics in the business of sports and recreation, and careers in sports and recreation management.

**Prerequisite:** None

### **MKTG 1370 | CONSUMER BEHAVIOR (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 2000 | GLOBAL MARKETING (45-0-3)**

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.

**Prerequisite:** MKTG 1100

### **MKTG 2010 | SMALL BUSINESS MANAGEMENT (45-0-3)**

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.

**Prerequisite:** None

### **MKTG 2030 | DIGITAL PUBLISHING AND DESIGN (15-60-3)**

This Marketing course covers the knowledge and skills required to use design and 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.

**Prerequisite:** COMP 1000

### **MKTG 2060 | MARKETING CHANNELS (45-0-3)**

This course 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.

**Prerequisite:** None

### **MKTG 2070 | BUYING AND MERCHANDISING (45-0-3)**

This course 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.

**Prerequisite:** None

### **MKTG 2080 | REGULATIONS AND COMPLIANCE IN SPORTS (45-0-3)**

This course introduces the legal principles involved in sports. Topics include: nature of sports law, sports law and change, sports law environment, court decision processes, and sports contracts.

**Prerequisite:** None

### **MKTG 2090 | MARKETING RESEARCH (45-0-3)**

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.

**Prerequisite:** MKTG 1100

### **MKTG 2160 | ADVANCED SELLING (45-0-3)**

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.

**Prerequisite:** MKTG 1160

### **MKTG 2180 | PRINCIPLES OF SPORTS MARKETING (45-0-3)**

This course applies the principles of marketing utilized in the sports industry. Topics include nature of sports marketing, role of sports marketing, marketing principles specific to sports, marketing mix to achieve goals, and electronic landscape and media in sports.

**Prerequisite:** None

### **MKTG 2210 | ENTREPRENEURSHIP (90-0-6)**

This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning; location analysis; financing; developing a business plan; entrepreneurial ethics; and social responsibility.

**Prerequisite:** Program Admission

### **MKTG 2270 | RETAIL OPERATIONS MANAGEMENT (45-0-3)**

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.

**Prerequisite:** Program Admission

### **MKTG 2280 | SPORTS MANAGEMENT (45-0-3)**

This course emphasizes leadership and management in the sports marketing industry. Topics include: leadership, budgeting, project management, event management, contract negotiation, and international sports marketing.

**Prerequisite:** MKTG 1280

### **MKTG 2290 | MARKETING INTERNSHIP/PRACTICUM (0-135-3)**

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.

**Prerequisite:** Advisor Approval

### **MKTG 2300 | MARKETING MANAGEMENT (45-0-3)**

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.

**Prerequisite:** Advisor Approval and MKTG 1100

### **MKTG 2500 | EXPLORING SOCIAL MEDIA (45-0-3)**

This course explores the environment and current trends of social media as it relates to marketing functions. Topics include: 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.

**Prerequisite:** MKTG 1100 or HRTM 1201

### **MKTG 2550 | ANALYZING SOCIAL MEDIA (26-38-3)**

This course analyzes the application of social media to an integrated marketing communication plan. Topics include technical writing for social media, social media auditing, Social Media ROI, trend analysis, social media analytics, and Customer Experience Management (CEM).

**Prerequisite:** MKTG 1100

## **Magnetic Resonance Imaging**

### **MRIM 2300 | ORIENTATION AND INTRODUCTION TO MRI (45-0-3)**

This course provides knowledge of patient care and assessment, contrast agents, MRI safety, medical ethics and law, cultural diversity, and patient information management. Topics include: MRI history, anatomy, patient care and assessment, MRI safety, instrumentation, MRI fundamentals, and image parameters.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2320 , MRIM 2350

### **MRIM 2320 | MRI PROCEDURES AND CROSS SECTIONAL ANATOMY (30-30-3)**

Provides knowledge of anatomy, pathology, scanning protocols, contrast administration, and contraindications for magnetic resonance imaging of the head and neck, spine, thorax, abdomen, pelvis, and musculoskeletal system. Topics include: anatomy, scanning protocol, MRI safety, image contrast, and image formation.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2300 , MRIM 2350

### **MRIM 2330 | MRI PHYSICS AND INSTRUMENTATION (30-30-3)**

This course introduces the concepts of basic physics and instrumentation for magnetic resonance imaging. Topics include imaging parameters, image quality, MRI

Fundamentals, image processing and display, and special procedures.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2360 , MRIM 2370

### **MRIM 2350 | MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION (0-270-6)**

Introduces students to the magnetic resonance imaging department and provides an opportunity for participation in and observation of MRI procedures. Topics include equipment utilization, contrast medias, exam preparation, patient care and assessment, scanning protocol, image quality and progress toward completion of clinical competency evaluations.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2300 , MRIM 2320

### **MRIM 2360 | MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION II (0-270-6)**

Intermediate course that reinforces learning obtained in MRIM 2350. Topics include exam preparations, patient care and assessment, equipment utilization, image quality, scanning protocol, contrast media, quality control, and progress toward completion of clinical competency evaluations.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2330 , MRIM 2370

### **MRIM 2370 | MRI REVIEW (45-0-3)**

This course provides a comprehensive review of patient care, imaging procedures, imaging formation and data acquisition for the magnetic resonance imaging certification exam. Topics include: anatomy, scanning protocol, MRI safety, image contrast, image formation, exam preparation, contrast media, patient care and assessment, equipment utilization, image quality, imaging parameters, MRI fundamentals, image processing and display, and special procedures.

**Prerequisite:** Program admission

**Corequisite:** MRIM 2300 , MRIM 2320, MRIM 2330

## **Medical Skin Care Specialist**

### **MSCS 1010 | ESSENTIALS OF MEDICAL ESTHETICS (45-0-3)**

This course introduces the common skin conditions that motivate patients to seek professional treatment and how to identify certain medical conditions, in addition to the basic chemical reactions that take place in the skin. The student will develop the skills to treat conditions resulting from the environment, heredity, and lifestyles.

**Prerequisites:** ALHS 1011, ALHS 1040

**Corequisite:** MAST 1010

### **MSCS 1020 | ADVANCED MEDICAL SKIN CARE TREATMENT (15-30-2)**

This course introduces the various diseases and conditions of the skin, common skin allergens and reactions, and results of changes in skin characteristics. The student will have knowledge of types of skin injuries and how the skin is regenerated. The student will develop the skills to treat conditions resulting from the environment, heredity, and lifestyles. The student will perform multiple skin regenerating procedures.

**Prerequisites:** MSCS 1010

## **Music**

### **MUSC 1101 | MUSIC APPRECIATION (45-0-3)**

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.

**Prerequisite:** Appropriate Degree Level Writing (English) and Reading Placement Test Scores

## **Nurse Aide**

### **NAST 1100 | NURSE AIDE FUNDAMENTALS (60-75-6)**

This course 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. Other topics include 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.

### **NAST 1500 | NURSE AIDE ACUTE CARE INTERNSHIP (15 - 45 - 2)**

This course provides students who have completed nurse aide fundamental training with advanced knowledge, skills, and clinical application necessary for carrying out daily patient care activities in the hospital setting. Emphasis is placed on recognizing and reporting changes in the physical and cognitive conditions of hospitalized patients and assisting with specialized care of these patients. Topics include: admissions/discharges/transfers; respiratory changes, airway management and oxygen administration therapy/safety; neurological changes and seizure precautions; hypo-/hyperglycemic conditions and testing; IV therapy and central lines; allergic reactions; emergency procedures; pre- and post-operative care.

**Prerequisite:** NAST 1100

## **Orthopedic Technology**

### **ORTT 1010 | ORTHOPEDIC ANATOMY AND PHYSIOLOGY (45-30-4)**

This course offers a detailed study of the skeletal-muscular systems with emphasis on soft tissue injuries, fractures, fracture healing, as well as relevant complications. The study of other body systems as they relate to the treatment of orthopedic injuries is also included.

**Prerequisite:** Program Admission

**Corequisite:** ORTT 1020, ORTT 1030

### **ORTT 1020 | ORTHOPEDIC TECHNIQUES I (45-30-4)**

This course serves as an introduction to the cast room to include different types of supplies, instruments, techniques for the application of basic types of splints and casts.

Introduction to traction set-ups. This course will include the application of casts and traction in the laboratory setting.

**Prerequisite:** Program Admission

**Corequisite:** ORTT 1010, ORTT 1030

### **ORTT 1030 | INTRODUCTION TO ORTHOPEDIC SURGICAL TECHNIQUES (45-30-4)**

This course provides an overview of the surgical techniques utilized by the orthopedic technology profession and develops the fundamental concepts and principles necessary to successfully participate on an orthopedic surgical team. Topics include: orientation to orthopedic surgical techniques, asepsis and the surgical environment, basic orthopedic instrumentation and equipment, principles of sterilization process and application.

**Prerequisite:** Program Admission

**Corequisite:** ORTT 1010, ORTT 1020

### **ORTT 1040 | ADVANCED ORTHOPEDIC ANATOMY AND PHYSIOLOGY (45-30-4)**

This course provides advanced instruction on orthopedic anatomy, physiology, injuries and diseases. Topics will include the evaluation and treatment of specific orthopedic injuries. Orthopedic diseases will be discussed along with pediatric orthopedics and congenital diseases.

**Prerequisite:** ORTT 1010

**Corequisite:** ORTT 1050, ORTT 2010

### **ORTT 1050 | ORTHOPEDIC TECHNIQUES II (45-30-4)**

This course will have emphasis on advance casting techniques, assessment and treatment of casting complications, application of specialty casts, advanced traction configurations. The evaluation and treatment of the orthopedic trauma patient will also be covered.

**Prerequisite:** ORTT 1020

**Corequisite:** ORTT 1040, ORTT 2010

### **ORTT 2010 | ORTHOPEDIC TECHNOLOGY CLINICAL I (0-225-5)**

This course provides the opportunity for students to put into practice, the orthopedic technology procedures through participation in and/or observation of actual orthopedic patients in a hospital setting and/or in an orthopedic physician's office. Topics will include the placing of splints, cast removal, basic casting, dressing changes. Participation and/or observation of fracture manipulations. Setting up overhead frame and trapeze will be included.

**Prerequisite:** ORTT 1020

**Corequisite:** ORTT 1050

### **ORTT 2020 | ORTHOPEDIC TECHNOLOGY CLINICAL II (0-315-7)**

This course provides the opportunity for students to complete all required orthopedic technology procedures through participation in and/or observation in a hospital setting or an orthopedic physician's office. Procedures will include cast cutting, cast applications, splinting, brace applications, setting up traction configurations, surgical procedures. This course will also provide an opportunity for students to participate in the role of the orthopedic technologist in the operating room.

**Prerequisites:** ORTT 1010, ORTT 1020, ORTT 1030, ORTT 1040, ORTT 1050

**Corequisite:** ORTT 2010

### **ORTT 2030 | ORTHOPEDIC TECHNOLOGY CAPSTONE (15-60-3)**

This course provides opportunities for students to organize themselves for entry into professional careers as orthopedic technologists. Topics include professional roles and credentialing (including preparation of resumes, interview techniques, and occupational demeanor); all-hazards preparation; professional workplace administrative functions (including professional documentation and medical billing and coding; review for the National Board for Certification of Orthopaedic Technologists (NBCOT) Orthopaedic Technologist Certified examination; and test-taking skills.

**Prerequisites:** Program Admission

## **Paralegal Studies**

### **PARA 1100 | INTRODUCTION TO LAW AND ETHICS (45-0-3)**

This course 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.

**Prerequisite:** None

### **PARA 1105 | LEGAL RESEARCH AND LEGAL WRITING I (45-0-3)**

This course 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.

**Prerequisites:** ENGL 1101, PARA 1100

### **PARA 1110 | LEGAL RESEARCH AND LEGAL WRITING II (45-0-3)**

Builds on competencies acquired in PARA 1102 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.

**Prerequisites:** ENGL 1101, PARA 1100, PARA 1105

### **PARA 1115 | FAMILY LAW (45-0-3)**

This course 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.

**Prerequisite:** PARA 1100

### **PARA 1120 | REAL ESTATE LAW (45-0-3)**

This course 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.

**Prerequisite:** Program Admission  
**Corequisite:** PARA 1100

#### **PARA 1125 | CRIMINAL LAW AND CRIMINAL PROCEDURE (45-0-3)**

This course 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.

**Prerequisite:** Program Admission  
**Corequisite:** PARA 1100

#### **PARA 1130 | CIVIL LITIGATION (45-0-3)**

This course 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.

**Prerequisite:** PARA 1100

#### **PARA 1135 | WILLS, TRUSTS, PROBATE, AND ADMINISTRATION (45-0-3)**

This course 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.

**Prerequisite:** Program Admission  
**Corequisite:** PARA 1100

#### **PARA 1140 | TORT LAW (45-0-3)**

This course 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.

**Prerequisite:** Program Admission  
**Corequisite:** PARA 1100

#### **PARA 1145 | LAW OFFICE MANAGEMENT (45-0-3)**

This course 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.

**Prerequisite:** Program Admission  
**Corequisite:** PARA 1100

#### **PARA 1150 | CONTRACTS, COMMERCIAL LAW AND BUSINESS ORGANIZATIONS (45-0-3)**

This course 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, professional associations and other business organizations, corporations and tax implications of different organizations.

**Prerequisite:** PARA 1100

#### **PARA 1200 | BANKRUPTCY/DEBTOR-CREDITOR RELATIONS (45-0-3)**

This course 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.

**Prerequisite:** PARA 1100

#### **PARA 1205 | CONSTITUTIONAL LAW (45-0-3)**

This course 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.

**Prerequisite:** PARA 1100

#### **PARA 1215 | ADMINISTRATIVE LAW (45-0-3)**

This course 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, rule-making, 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.

**Prerequisite:** PARA 1100

#### **PARA 2205 | ADVANCED LEGAL RESEARCH AND WRITING (45-0-3)**

Continues to develop writing skills developed in PARA 1105 and 1110 focusing on legal memoranda preparation. Additionally, students enhance legal research skills. Course competencies include research methodology, legal memoranda preparation, and substantive law research.

**Prerequisite:** ENGL 1102, PARA 1105, PARA 1100, PARA 1110

#### **PARA 2210 | PARALEGAL INTERNSHIP I (0-270-6)**

This course 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.

Note: Paralegals may not provide legal services directly to the public except as permitted by law.

Persons who have been convicted of a felony offense are not employable in the legal field. Evidence of a current satisfactory criminal record background check is required at the student's expense prior to participation in the internship.

**Prerequisite:** Advisor Approval, ENGL 1102, PARA 1105, PARA 1100, PARA 1110

### PARA 2215 | PARALEGAL INTERNSHIP II (0-270-6)

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 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.

Note: Paralegals may not provide legal services directly to the public except as permitted by law.

Persons who have been convicted of a felony offense are not employable in the legal field. Evidence of a current satisfactory criminal record background check is required at the student's expense prior to participation in the internship.

**Prerequisite:** Advisor Approval, must be in last semester of program

## Pharmacy Assistant

### PHAR 1000 | PHARMACEUTICAL CALCULATIONS (45-30-4)

This course develops knowledge and skills in pharmaceutical calculations procedures. Topics include systems of measurement, medication dispensing calculations, pharmacy mathematical procedures, and calculation tools and techniques.

**Prerequisites:** MATH 1012, MATH 1111

### PHAR 1010 | PHARMACY TECHNOLOGY FUNDAMENTALS (60-30-5)

Provides an overview of the pharmacy technology field and develops the fundamental concepts and principles necessary for successful participation in the pharmacy field. Topics include safety, orientation to the pharmacy technology field, Fundamental principles of chemistry, basic laws of chemistry, ethics and laws, definitions and terms, and reference sources.

**Prerequisite:** None

### PHAR 1020 | PRINCIPLES OF DISPENSING MEDICATIONS (45-45-4)

This course introduces the student to principles of receiving, storing, and dispensing medications. Topics include purchasing, packaging, and labeling drugs; pharmacy policies and procedures; documentation; inventory and filing systems; compounding; storage and control; pharmacy equipment; and health care organizational structure. This course provides laboratory and clinical practice.

**Prerequisites:** PHAR 1000, PHAR 1010

### PHAR 1030 | PRINCIPLES OF STERILE MEDICATION PREPARATION (45-45-4)

Continues the development of student knowledge and skills in preparing medication, processing glassware, and maintaining an aseptic environment. Topics include aseptic and sterile techniques, parenteral admixtures, hyperalimentation, chemotherapy, filtering, disinfecting, contamination, ophthalmic preparations, infection control, and quality control.

**Prerequisites:** PHAR 1000, PHAR 1010

### PHAR 1040 | PHARMACOLOGY (60-0-4)

**Prerequisite:** Program Admission

The course introduces the students to principles and knowledge about all classifications of medication. Topics include disease states and treatment modalities, pharmaceutical side effects and drug interactions, control substances, specific drugs, and drug addiction and abuse.

### PHAR 1050 | PHARMACY TECHNOLOGY PRACTICUM (0-225-5)

Orients students to the clinical environment and provides experiences with the basic skills necessary for the pharmacy technician. Topics include storage and control, documentation, inventory and billing, community practice, institutional practice, and communication.

**Prerequisites:** PHAR 1000, PHAR 1010

### PHAR 1055 | PHARMACY ASSISTANT PRACTICUM (0-225-5)

This course orients students to the clinical environment and provides experiences with the basic skills necessary for the pharmacy assistant. Topics include purchasing, packaging and labeling drugs; distribution systems; pharmacy policies and procedures; documentation; inventory and filing systems; compounding; contamination control; storage and control; pharmacy equipment, and health care organizational structures.

**Prerequisites:** ALHS 1011, ALHS 1090, MATH 1012, PHAR 1000, PHAR 1010, PHAR 1020, PHAR 1040

### PHAR 2060 | ADVANCED PHARMACY TECHNOLOGY PRINCIPLES (30-30-3)

This course presents the advanced concepts and principles needed in the pharmacy technology field. Topics include physician orders, patient profiles, pharmacy data systems, job readiness, legal requirements, inventory and billing, pharmaceutical calculations review and pharmacology review.

**Prerequisites:** COMP 1000, PHAR 1030, PHAR 1050

**Corequisites:** PHAR 1050

### PHAR 2070 | ADVANCED PHARMACY TECHNOLOGY PRACTICUM (0-225-5)

Continues the development of student knowledge and skills applicable to pharmacy technology practice. Topics include dispensing responsibilities, physician orders, controlled substances, hyperalimentation, chemotherapy, patient profiles, pharmacy data systems, ophthalmic preparations, and hospital/retail/home health pharmacy techniques.

**Prerequisites:** COMP 1000, PHAR 1030, PHAR 1050

## Phlebotomy Technician

### PHLT 1030 | INTRODUCTION TO VENIPUNCTURE (30-30-3)

This course 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.

**Prerequisite:** Program Admission

### PHLT 1050 | CLINICAL PRACTICE (0-225-5)

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.

**Prerequisite/Corequisite:** PHLT 1030

## Physical Science

### PHSC 1111 | PHYSICAL SCIENCE (30-45-3)

This course introduces the fundamentals of classical physics, the solar system, and universe from a descriptive viewpoint. Topics include mechanics, temperature and heat, waves, electricity and magnetism, and astronomy. Laboratory exercises supplement class work. Computer use is an integral part of class and laboratory assignments.

**Prerequisite:** Regular Admission

### PHSC 1050 | APPLIED PHYSICAL SCIENCE (40-15-3)

Surveys the concepts and application of physical science. Emphasizes developing a vocabulary of the terminology and the ability to identify field examples. Topics include: measurement; energy; heat; temperature, wave characteristics; electricity, magnetism, and astronomy. This is a Physical Science course for diploma and technical certificate programs.

**Prerequisite:** MATH 1013

## Physics

### PHYS 1110 | CONCEPTUAL PHYSICS (45-0-3)

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.

**Prerequisite:** MATH 1101 or MATH 1111 or MATH 1103

**Corequisite:** PHYS 1110L

### PHYS 1110L | CONCEPTUAL PHYSICS LAB (0-45-1)

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.

**Prerequisite:** MATH 1101 or MATH 1111 or MATH 1103

**Corequisite:** PHYS 1110

### PHYS 1111 | INTRODUCTORY PHYSICS I (45-0-3)

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.

**Prerequisite:** ENGL 1101 AND MATH 1112 OR MATH 1113

**Corequisite:** PHYS 1111L

### PHYS 1111L | INTRODUCTORY PHYSICS LAB I (0-45-1)

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.

**Prerequisite:** ENGL 1101 AND MATH 1112 OR MATH 1113

**Corequisite:** PHYS 1111

### PHYS 1112 | INTRODUCTORY PHYSICS II (45-0-3)

The second of two algebra and trigonometry based courses in the physics sequence. 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).

**Prerequisite:** PHYS 1111, PHYS 1111L

**Corequisite:** PHYS 1112L

### PHYS 1112L | INTRODUCTORY PHYSICS LAB II (0-45-1)

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.

**Prerequisite:** PHYS 1111, PHYS 1111L

**Corequisite:** PHYS 1112

## Plumbing

### PLBG 1000 | INTRODUCTION TO PLUMBING (45-0-3)

This course provides an introduction to the Plumbing construction trade. The knowledge and skills required to succeed in the Plumbing industry are emphasized. Topics include general safety rules and practices, introduction to construction and the pipe trades, and work ethics, communication, and affective skills and practices.

**Prerequisite:** None

### PLBG 1160 | PLUMBING DRAWINGS (15-60-3)

This course introduces the reading and interpretation of sets of building drawings. Topics include types of plans, scales, specifications, conventions, and schedules.

**Prerequisite:** None

**Co-requisite:** PLBG 1000

### PLBG 1210 | PIPES, VALVES, AND FITTINGS (30-30-3)

This course introduces the student to the materials, pipes, valves, fittings, and joining methods used in the plumbing trade. Topics include pipes, fittings, and valves, hangers and supports, and joining techniques.

**Prerequisite:** None

### PLBG 1220 | DRAINAGE SYSTEMS (30-30-3)

Provides an introduction to the treatment, design and materials used in plumbing, drainage systems. Applicable plumbing codes are also discussed. Topics include public and private sewage systems and treatment; materials, fittings, and valves; traps, venting, and grade; ejector and sump pumps; design, sizing, and installation of drainage systems.

**Prerequisite:** None

### PLBG 1240 | WATER SUPPLY SYSTEMS (30-30-3)

Provides an introduction to the sources, treatment, design, and materials used in residential cold and hot water distribution systems. Applicable plumbing codes are also discussed. Topics include public and private water systems; materials and fittings; valves; water treatment; water mains and services; hot water supply; design and installation of water supply systems.

Prerequisite: None

### **PLBG 1260 | PLUMBING FIXTURES AND APPLIANCES (15-60-3)**

This course introduces the identification, theory, application and installation of residential plumbing fixtures, trim and appliances.

### **PLBG 1280 | GAS PIPING, VENTING, AND APPLIANCES (15-60-3)**

Prerequisite: None

This course provides instruction in the materials and design of building gas supply systems and the installation of gas appliances. Emphasis is placed in conformance with applicable gas codes. Topics include types of gas, safety, materials and fittings, valves, design and size gas systems, gas appliances and controls, and gas venting.

Prerequisite: None

## **Practical Nursing**

### **PNNG 2010 | INTRODUCTION TO PHARMACOLOGY AND CLINICAL CALCULATIONS (15-45-2)**

Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills. 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.

Prerequisite: Program Admission

### **PNNG 2030 | NURSING FUNDAMENTALS (60-90-6)**

An introduction to the nursing process. Topics include: nursing as a profession; 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, and an introduction to physical assessment; customer/client relationships; standard precautions; basic life support; infection control/blood-borne/airborne pathogens; and basic emergency care/first aid and triage.

Prerequisite: Program Admission

### **PNNG 2035 | NURSING FUNDAMENTALS CLINICAL (0-90-2)**

An introduction to nursing practice in the clinical setting. Topics include but are not limited to: history taking; physical assessment; nursing process; critical thinking; activities of daily living; documentation; client education; standard precautions; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; and perioperative care.

Prerequisite: Program Admission

### **PNNG 2210 | MEDICAL SURGICAL NURSING I (60-0-4)**

Focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; 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 cardiovascular, respiratory, and hematological

and immunological systems.

Prerequisite: Program Admission

### **PNNG 2220 | MEDICAL SURGICAL NURSING II (60-0-4)**

This second course in a series of four focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; 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 system.

Prerequisite: Program Admission

### **PNNG 2230 | MEDICAL SURGICAL NURSING III (60-0-4)**

This third course in a series of four focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; mental health; 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, sensory, and musculoskeletal systems.

Prerequisite: Program Admission

### **PNNG 2240 | MEDICAL SURGICAL NURSING IV (60-0-4)**

This fourth course in a series of four courses focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole, oncology; 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 reproductive systems.

Prerequisite: Program Admission

### **PNNG 2250 | MATERNITY NURSING (45-0-3)**

Focuses on health management and maintenance and the 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: health management and maintenance and prevention of illness, care of the individual as a whole, pathological and nonpathological concerns in obstetric clients and the newborn; client care, treatments, pharmacology, and diet therapy related to obstetric clients and the newborn; and standard precautions.

Prerequisite: Program Admission

### **PNNG 2255 | MATERNITY NURSING CLINICAL (0-45-1)**

Focuses on clinical health management and maintenance and the 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: health management and maintenance and prevention of illness, care of the individual as a whole, pathological and nonpathological concerns in obstetric clients and the newborn; client care, treatments, pharmacology, and diet therapy related to obstetric clients and the newborn; and standard precautions.

**Prerequisite:** Program Admission

### **PNSG 2310 | MEDICAL SURGICAL NURSING CLINICAL (0-90-2)**

This first clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 375 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

**Prerequisite:** Program Admission

### **PNSG 2320 | MEDICAL SURGICAL NURSING CLINICAL II (0-90-2)**

This second clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 375 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

**Prerequisite:** Program Admission

### **PNSG 2330 | MEDICAL SURGICAL NURSING CLINICAL III (0-90-2)**

This third clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 375 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric

and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

**Prerequisite:** Program Admission

### **PNSG 2340 | MEDICAL SURGICAL NURSING CLINICAL IV (0-90-2)**

This fourth clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 375 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

**Prerequisite:** Program Admission

### **PNSG 2410 | NURSING LEADERSHIP (15-0-1)**

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, supervisory skills, client education methods, group dynamics and conflict resolution.

**Prerequisite:** Program Admission

### **PNSG 2415 | NURSING LEADERSHIP CLINICAL (0-90-2)**

Builds on the concepts presented in prior nursing courses and develops the clinical skills necessary for successful performance in the job market, focusing on practical applications. Topics include: application of the nursing process, critical thinking, supervisory skills, client education methods, and group dynamics.

**Prerequisite:** Program Admission

## **Political Science**

### **POLS 1101 | AMERICAN GOVERNMENT (45-0-3)**

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.

**Prerequisite:** Appropriate Degree Level English and Reading Placement Test Scores

## Polysomnographic

### PSGT 1101 | INTRODUCTION TO SLEEP TECHNOLOGY (60-120-7)

This course provides an overview of the sleep technology field and develops the fundamental knowledge, skills, attitudes, and techniques necessary to successfully participate as an entry level polysomnographic technician. Emphasis will be placed on the profession of sleep technology the history and scope of practice; ethics, roles and professional behaviors; normal sleep-wake physiology and pathophysiology; basic sciences of sleep-wake related neuroanatomy including associated upper and lower airway anatomy and physiology; circadian rhythm biology, respiratory and cardiac systems; fundamentals of sleep-wake EEG waveform recognition; EEG microstructure; sleep architecture and all sleep-wake stage recognition.

**Prerequisites:** ALHS 1011, ALHS 1090, ENGL 1010, MATH 1012, PSYC 1010, ALHS 1040

**Corequisite:** PSGT 1102

### PSGT 1102 | ESSENTIALS OF SLEEP TECHNOLOGY (60-120-7)

This course provides an overview of the sleep technology field and develops the fundamental knowledge, skills, attitudes, and techniques necessary to successfully participate as an entry level polysomnographic technician. Emphasis will be placed on Sleep-Disordered breathing; Sleep-Disordered breathing treatment modalities including CPAP, BiLevel PAP and oxygen, EMG Dyssomnia events; specialized testing including MSLT, MWT and Seizure protocols; specialized sleep disorders including narcolepsy, parasomnias, and insomnias; sleep center safety and the process flow of patients.

**Prerequisites:** ALHS 1011, ALHS 1090, ENGL 1010, MATH 1012, PSYC 1010, ALHS 1040

**Corequisite:** PSGT 1101

### PSGT 1111 | POLYSOMNOGRAPHIC APPLICATIONS (60-195-9)

An introduction to the polysomnographic skills and principles necessary for procedures to be performed in the clinical setting. Emphasis will be placed on the practical application of sleep technology. Students will be required to master the skills of patient and equipment preparation; appropriate choice of leads; electrodes and sensors; proper patient preparation techniques and 10-20 EEG measurement. Instrumentation will be stressed including digital systems, oximeters, various PAP units and PAP patient interfaces, PTAf, RIP, end-tidal TCO<sub>2</sub> and oximetry. An understanding of electrical currents will be covered including AC/DC amplifiers, EEG filters, and Common Mode Rejection Ratio. Data acquisition techniques will be incorporated including polysomnographic artifact resolution, physician order clarification, patient assessment and orientation techniques, monitoring and documentation. Students will practice polysomnographic laboratory skills including: multiple appropriate polysomnographic subject hook-ups for various types of polysomnographic testing acquiring competent skills in: charting; record documentation; application of PAP and oxygen devices and protocols; titration protocols; proper care of equipment including cleaning; sterilization; storage and archiving of data.

**Prerequisites:** PSGT 1101, PSGT 1102

### PSGT 2100 | POLYSOMNOGRAPHIC PRACTICUM (0-270-6)

A supervised clinical course, provides the student the continued development of skills and concepts in sleep disorder centers. Students will apply the skills and concepts learned in PSGT 1111 Polysomnographic Applications and other courses as they interview patients; explain procedures; demonstrate professional ethics and behavior; prepare equipment; perform patient assessment and orientation techniques and review patient charts. Students will appropriately adjust instrumentation and perform 10-20 EEG measurement; attach the necessary polysomnographic equipment to patients; perform polysomnographic studies, therapeutic interventions including PAP, BiLevel and oxygen interventions as well as monitor and document all interactions and procedures. Students will be required to complete a minimum of 210 hours of clinical rotation in order to successfully complete the Polysomnographic diploma program. For Board of Registered Polysomnographic Technologists (BRPT) certification eligibility upon completion of this course, please see the Program Chair.

**Prerequisites:** PSGT 1101, PSGT 1102, PSGT 1111

**Corequisite:** PSGT 2101

### PSGT 2101 | SLEEP TECHNOLOGY – SPECIAL TOPICS (45-0-3)

A study of polysomnographic topics encompassing data management, mathematical equations used in polysomnographic reports, a focus on sleep report and chart review, and review of the ICSD-2 – International Classification of Sleep Disorders, 2nd version – with emphasis on the disorders evaluated during polysomnographic studies. This course also covers scoring of adult records including sleep staging, EEG arousal awakening, REM Density, recognition of atypical EEG patterns, scoring of ECG dysrhythmias, respiratory and PLMS, and pediatric sleep and sleep staging. Basic pharmacology for the sleep lab will be discussed. This course is designed to prepare the student for the Board of Registered Polysomnographic Technologists examination and includes exam preparation and review.

**Prerequisite:** PSGT 1111

**Corequisite:** PSGT 2100

## Psychology

### PSYC 1010 | BASIC PSYCHOLOGY (45-0-3)

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.

**Prerequisite:** None

### PSYC 1101 | INTRODUCTORY PSYCHOLOGY (45-0-3)

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.

**Prerequisite:** Appropriate Degree Level Writing (English) and Reading Placement Test Scores

**PSYC 2103 | HUMAN DEVELOPMENT (45-0-3)**

Emphasizes changes that occur during the human life cycle beginning with conception and continuing through late adulthood and death and emphasizes the scientific basis of our knowledge of human growth and development and the interactive forces of nature and nurture. Topics include but are not limited to theoretical perspectives and research methods, prenatal development and child birth, stages of development from infancy through late adulthood, and death and dying.

**Prerequisite:** PSYC 1101

**PSYC 2250 | ABNORMAL PSYCHOLOGY (45-0-3)**

Emphasizes the etiology and treatment considerations of various forms of abnormal behavior. Topics include historical and contemporary approaches to psychopathology; approaches to clinical assessment and diagnosis; understanding and defining classifications and psychological disorders.

**Prerequisite:** PSYC 1101

**Radiology Technology****RADT 1010 | INTRODUCTION TO RADIOLOGY (45-30-4)**

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.

**Prerequisite:** Program admission

**RADT 1030 | RADIOGRAPHIC PROCEDURES I (30-45-3)**

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 body cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

**Prerequisites:** Program admission

**RADT 1060 | RADIOGRAPHIC PROCEDURES II (30-45-3)**

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; and minor procedures.

**Prerequisites:** Program admission

**RADT 1065 | RADIOGRAPHIC SCIENCE (30-0-2)**

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.

**Prerequisite:** Program Admission, Program Instructor Approval

**RADT 1075 | RADIOGRAPHIC IMAGING (45-30-4)**

The content of this course introduces factors that govern and influence the production of the radiographic image using analog and digital radiologic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high quality diagnostic radiologic images. Topics comprise of image quality, including radiographic density; radiographic contrast, recorded detail, distortion, grids, image receptors and holders (analog and digital), processing considerations (analog and digital); image acquisition (analog, digital, and PACS), image analysis, and image artifacts (analog and digital). Guidelines for selecting exposure factors and evaluating images within a digital system will assist students to bridge between film-based and digital imaging systems. Factors that impact image acquisitions, display, archiving, and retrieval are discussed. Laboratory experiences will demonstrate applications of the theoretical principles and concepts.

**Prerequisite:** Program Admission

**RADT 1085 | RADIOGRAPHIC EQUIPMENT (30-30-3)**

Course content establishes a knowledge base in radiographic, fluoroscopic and mobile equipment requirements and design. Instruction also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control, and quality management principles of analog and digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts.

**Prerequisite:** Program Admission

**RADT 1200 | PRINCIPLES OF RADIATION BIOLOGY AND PROTECTION (30-0-2)**

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.

**Prerequisite:** Program admission

**RADT 1320 | CLINICAL RADIOGRAPHY I (0-180-4)**

Introduces students to the hospital clinical setting and provides an opportunity for students to participate in or observe radiographic procedures. Topics include: orientation to hospital areas and procedures; orientation to mobile/surgery; orientation to radiography and fluoroscopy; participation in and/or observation of procedures related to body cavities, the shoulder girdle, and upper extremities. Activities of students are under direct supervision.

**Prerequisite:** Program admission

**RADT 1330 | CLINICAL RADIOGRAPHY II (0-315-7)**

Continues introductory student learning experiences in the hospital setting. Topics include: equipment utilization; exposure techniques; attend to and/or observation of routine projections of the lower extremities, pelvic girdle, and spine;

attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems; and attend to and/or observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision.

**Prerequisites:** Program admission

#### **RADT 2090 | RADIOGRAPHIC PROCEDURES II (15-45-2)**

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.

**Prerequisite:** Program admission

#### **RADT 2201 | INTRODUCTION TO COMPUTED TOMOGRAPHY (30-0-2)**

Introduces the student to computed tomography and patient care in the CT suite. Topics include: the history of computed tomography, patient care and assessment, anatomy, contrast agents, radiation safety and protection, medical ethics and law, cultural diversity, and patient information management.

**Prerequisite:** Program admission

**Corequisite:** RADT 2220, RADT 2250

#### **RADT 2210 | COMPUTED TOMOGRAPHY PHYSICS AND INSTRUMENTATION (75-0-5)**

Introduces the concepts of basic physics and instrumentation for computed tomography. Topics include: computer concepts, system operation and components, image processing and display, instrumentation, single slice and volume scanning, 3-D volume rendering, image quality and artifacts, radiation protection and quality control.

**Prerequisite:** Program admission

**Corequisite:** RADT 2230, RADT 2265

#### **RADT 2220 | COMPUTED TOMOGRAPHY PROCEDURES I (45-0-3)**

Provides knowledge CT procedures of the head, chest, abdomen, and pelvis. Topics include: anatomy, pathology, scanning procedures, scanning protocol, contrast administration, and contraindications for computed tomography.

**Prerequisite:** Program admission

**Corequisite:** RADT 2201, RADT 2250

#### **RADT 2230 | COMPUTED TOMOGRAPHY PROCEDURES II (45-0-3)**

Provides knowledge of anatomy, pathology, scanning protocols, contrast administration, and contraindications for computed tomography of the neck, spine, musculoskeletal system, and special procedures. Post-processing and quality assurance criteria are addressed. Topics include: anatomy, pathology, scanning protocol, contrast administration and contraindications, post processing and quality assurance.

**Prerequisite:** Program admission

**Corequisite:** RADT 2210, RADT 2265

#### **RADT 2250 | COMPUTED TOMOGRAPHY CLINICAL I (0-180-4)**

Introduces students to the computed tomography department and provides an opportunity for participation in and observation of CT procedures. Students progress toward completion of clinical competency evaluations. Topics include: exam preparation, patient care, equipment utilization, exposure techniques, evaluation of CT procedures, and incorporation of contrast media.

**Prerequisite:** Program admission

**Corequisite:** RADT 2201, RADT 2220

#### **RADT 2260 | RADIOLOGIC TECHNOLOGY REVIEW (45-0-3)**

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education.

**Prerequisite:** Program admission

#### **RADT 2265 | COMPUTED TOMOGRAPHY CLINICAL II (0-180-4)**

Provides students with continued computed tomography work experience. Students demonstrate increased proficiency levels in skills introduced in Computed Tomography Procedures and practiced in the previous clinical course. Students complete clinical competency evaluations. Topics include: exam preparation, patient care, equipment utilization, exposure techniques, evaluation of CT procedures, and incorporation of contrast media.

**Prerequisite:** Program admission

**Corequisite:** RADT 2210, RADT 2230

#### **RADT 2340 | CLINICAL RADIOGRAPHY III (0-270-6)**

Provides students with continued hospital setting work experience. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care; behavioral and social competencies; performance and/or observation of minor special procedures, special equipment use, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

**Prerequisite:** Program admission

#### **RADT 2360 | CLINICAL RADIOGRAPHY IV (0-405-9)**

Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in all of the radiographic procedures courses and practiced in previous clinical radiography courses. Topics include: patient care; behavioral and social competency; advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; integration of procedures and/or observation of angiographic, interventional, minor special procedures; integration of procedures and/or observation of special equipment use; integration of procedures and/or observation of routine and special radiographic procedures; and final completion of all required clinical competencies. Execution of radiographic procedures will be conducted under direct and indirect supervision.

**Prerequisite:** Program admission

### **Sports and Fitness Management**

#### **HORT 1330 | TURFGRASS MANAGEMENT (37-52-4)**

This course provides 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.

**Prerequisite:** None



**RELM 2010 | INTRODUCTION TO SPORTS AND FITNESS MANAGEMENT (39-17-3)**

This course will provide the student with an understanding of the sociological, philosophical, economical, and historical aspects of sports and fitness. This course will also provide an introduction to sports and fitness as a profession and investigate contemporary issues in this field.

**Prerequisite:** None

**RELM 2020 | RECREATION LEADERSHIP AND SUPERVISION (45-0-3)**

This course provides theories and techniques in leadership, group dynamics, and personnel management as they relate to programming and staff supervision in recreation agencies. Emphasis is on personnel management techniques, including job analysis, recruitment and career development.

**Prerequisite:** None

**RELM 2030 | SPORTS AND FITNESS FACILITY MANAGEMENT AND DESIGN (45-0-3)**

This course provides students with learning experiences in the administrative tasks of planning and designing new recreational facilities, and renovating and maintaining existing sports and fitness facilities.

**Prerequisite:** None

**RELM 2040 | PROGRAM PLANNING IN SPORTS AND FITNESS (30-30-3)**

This course provides practical knowledge and experiences in the essential elements and design concepts of program planning. Emphasis is placed on student involvement in planning and directing programs for diverse populations in a variety of settings.

**Prerequisite:** None

**RELM 2042 | BEGINNING TENNIS (15-45-2)**

This course provides students with the basic knowledge, techniques and skills for tennis which prepares them to participate in an activity that promotes a healthy and active lifestyle.

**Prerequisite:** None

**RELM 2043 | WEIGHT TRAINING (15-45-2)**

This course provides students with the basic knowledge, techniques and skills for weight training which prepares them to participate in an activity that promotes healthy and active lifestyles.

**Prerequisite:** None

**RELM 2045 | BEGINNING GOLF (15-45-2)**

This course provides students with the basic knowledge, techniques and skills which prepares them to participate in an activity that promotes healthy and active lifestyles.

**Prerequisite:** None

**RELM 2046 | VOLLEYBALL (15-45-2)**

This course provides students with the basic knowledge, techniques, and skills which prepares them to participate in an activity that promotes healthy and active lifestyles.

**Prerequisite:** None

**RELM 2050 | SPORTS AND FITNESS MANAGEMENT INTERNSHIP (0-90-2)**

This course will provide the student with practical experience under the supervision of a professional recreation agency.

The experience will allow the student to test the practical application of theories of sports and fitness management under the guidance and supervision of a recreational agency professional.

**Prerequisite:** None

**Associate of Science in Nursing****RNSG 1032 | FOUNDATIONS OF NURSING CARE (60-150-8)**

This course introduces students to the concepts and nursing skills which proved the foundation for nursing theory and practice. Concepts related to physiological and psychosocial needs, growth and development, stress, and adaptation, the nursing process and the roles of the associate degree nurse are introduced. Other concepts that will be studied are communication ethical and legal implications for nursing practice, nursing skills, cultural diversity, the teaching-learning process, nutrition, pharmacology, and critical thinking. A major focus of this course is the identification of the principles of nursing care which meet the physiological and psychosocial needs of culturally diverse clients from older child through later maturity. The student gains experience in the performance of beginning nursing skills in the skills, simulation, and clinical laboratories. The in the skills lab setting, the student practices and return demonstrates the foundational skills needed to provide care for needs of clients. In the simulation and clinical setting, the student is assisted to utilize the nursing process to meet the physiological and psychosocial needs of adult clients who require assistance with basic needs and then later in the semester the students will attend clinical in the hospital setting. The development of assessment skills is emphasized. The student utilizes communication techniques with faculty, staff, and interdisciplinary team members regarding care of assigned clients. The student is guided in adhering to legal and ethical standard in the simulation/clinical laboratory.

**Prerequisites:** BIOL 2113, BIOL 2113L, ENGL 1101, MATH 1111, PSYC 1101

**Corequisite:** BIOL 2114, BIOL 2114L, RNSG 1034

**RNSG 1034 | PHARMACOLOGY FOR NURSING (30-30-3)**

This course provides an introduction to nursing pharmacology that integrates the concepts of physiology, pathophysiology, chemistry, and nursing fundamentals to build a foundation for administering drug therapy to patients. Using a simple to complex approach, key content areas are presented to help conceptualize the important components related to nursing pharmacology. Incorporated into this course are major principles of mathematics such as ratio-proportion, fractions, decimals, and conversion between the various systems of weights and measures. Students will learn how to competently prepare and administer medications including oral, subcutaneous, intradermal, intramuscular, intravenous formulas and injections, and reconstitution of solutions. The basic concepts of pharmacology, such as drug testing and approval, pharmacokinetics and pharmacodynamics, therapeutic and toxic effects, dosage calculations, and challenges related to drug therapy, provide the foundation from which drug therapy associated with specific body systems can be addressed. Discussion of the major drug groups focuses on therapeutic actions and indications, pharmacokinetics, contraindications and cautions, adverse effects, clinically important drug-to-drug interactions and nursing considerations which emphasize the nursing process and focus on patient care and teaching. Prototypes of the major drug groups are emphasized. Lifespan considerations, evidence for best practice, patient safety, and critical thinking are integrated throughout the course.

**Prerequisites:** BIOL 2113, BIOL 2113L, ENGL 1101, MATH

1111, PSYC 1101

**Corequisite:** BIOL 2114, BIOL 2114L, RNSG 1032

### **RNSG 1036 | HEALTH AND ILLNESS I (60-90-6)**

This course is a study of the nursing care of culturally diverse clients from young adulthood through later maturity. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, mobility, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course.

**Prerequisites:** RNSG 1032, RNSG 1034

**Corequisite:** BIOL 2117, BIOL 2117L

### **RNSG 2032 | HEALTH AND ILLNESS II (60-90-6)**

This course is designed to further the concepts of Health and Illness I. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, mobility, immunity, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, and safety. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course.

**Prerequisites:** BIOL 2117, BIOL 2117L, RNSG 1036

**Corequisite:** PSYC 2103, RNSG 2034

### **RNSG 2034 | FAMILY NURSING (60-90-6)**

This course is designed to prepare the student to provide care for the childbearing client, family and the pediatric client. Emphasis is placed on the concepts of normal pregnancy and childbirth, complications in pregnancy and childbirth, oxygenation, sexuality, grief/loss, mood/affect, development, family, health-wellness-illness such as nutrition, patient education, and health promotion, communication, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

**Prerequisites:** BIOL 2117, BIOL 2117L, RNSG 1036

**Corequisite:** PSYC 2103, RNSG 2032

### **RNSG 2036 | HEALTH AND ILLNESS III (60-90-6)**

This course is designed to expand and integrate the concepts from RNSG 1036 and RNSG 2032. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, health-wellness-illness, caring interventions, managing care, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

**Prerequisites:** RNSG 2032, RNSG 2034

**Corequisite:** RNSG 2038

### **RNSG 2038 | LEADERSHIP (30-45-3)**

This course is designed to prepare the student to function in the role of a leader. Emphasis is placed on the concepts of managing care, advocacy, legal issues, policy, health care systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

**Prerequisites:** RNSG 2032, RNSG 2034

**Corequisite:** RNSG 2036

## **Supply Chain Management**

### **SCMA 1001 | INVENTORY CONTROL PROCEDURES (45-0-3)**

This course provides the student with the knowledge and skills necessary for successful control of a company's inventory. Emphasis will be placed on inventory methods and control systems, physical inventories, prevention of shortages, and how current technology can assist the manager in inventory planning and control. Topics include: systems, area of management attending, economic order quantities, ABC analysis, MRP, bar coding, physical inventory, and cycle counting.

**Prerequisite:** Program admission

### **SCMA 1002 | PURCHASING (45-0-3)**

This course is a study of the fundamental aspects of industrial and government purchasing. Emphasis is placed on procedures, techniques, and challenges in the field of purchasing, as well as the basic organization of purchasing departments. Topics include: purchasing role in business, industrial purchasing, purchasing capital equipment, purchasing management and organization, governmental purchasing, electronic data interchange, and ordering decisions.

**Prerequisite:** Program admission

### **SCMA 1004 | QUALITY IMPROVEMENT CONCEPTS (45-0-3)**

This course familiarizes students with the principles and concepts of leadership in quality improvement. Topics include the history of quality improvement, quality improvement leaders, quality tools, quality improvement implementation, team building for quality improvement, and future quality tenders.

**Prerequisite:** None

### **SCMA 1005 | DISTRIBUTION PRINCIPLES (45-0-3)**

This course provides an opportunity to study the wholesaling function and the movement and storage of goods. Emphasis is placed on the transportation, storing, and material handling functions. Topics include: historical and contemporary wholesale distribution, inbound and outbound operations, traffic operation concepts, distribution center safety and security, purchasing, inventory, financial management, and inside/outside selling.

**Prerequisite:** Program admission

### **SCMA 1006 | SUPPLY CHAIN MANAGEMENT PRINCIPLES (90-0-6)**

This course provides an opportunity to acquire the knowledge, skills, and attitudes necessary for the successful management and handling of materials. Emphasis is placed on basic functions and organization as well as traffic management, shipping and receiving, materials identification and storage systems. Topics include motivation and incentives, measured standards, freeing bottlenecks, reducing handling times and travel distances, quality control, cube utilization, handling of materials, and traffic management.

**Prerequisite:** None

### **SCMA 1008 | SUPPLY CHAIN MANAGEMENT OBI I (0-45-1)**

This course introduces students to the application and reinforcement of distribution and employability principles in an actual job placement or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into management applications on the job. Topics include problem solving, adaptability to the job, use of proper interpersonal skills, application of distribution management techniques, and professional development.

**Prerequisite:** Program admission

**SCMA 1009 | SUPPLY CHAIN MANAGEMENT OBI II (0-45-1)**

This course continues the application and reinforcement of distribution and employability principles in an actual job placement or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into management applications on the job. Topics include problem solving, adaptability to the job, use of proper interpersonal skills, application of distribution management techniques, and professional development.

**Prerequisite:** SCMA 1008

**SCMA 1010 | MANUFACTURING PLANNING AND CONTROL / JIT (75-0-5)**

Provides introductory instruction and hands-on experience in utilizing Manufacturing Resources Planning (MRP II)/Just-In-Time, a fully integrated production and information management software system. Instruction moves step-by-step through system implementation and teaches how a state-of-the-art MRP II system works in today's zero inventory and Just-In-Time environment. Topics include: bills of materials, MRP II logic, inventory planning, master production schedule, planning policies, statistical quality control (SQC) and quality at the source.

**Prerequisite:** Program admission

**SCMA 1050 | TRAFFIC MANAGEMENT (45-0-3)**

This course introduces the student to traffic management in industry. Topics include freight regulations, rates, classifications and documents, principles of managing traffic operations in a distribution center environment, international distribution, and hazardous material distribution.

**Prerequisite:** Program admission

**SCMA 1051 | WAREHOUSE OPERATIONS AND TECHNOLOGY (45-0-3)**

This course gives an intense managerial approach to the proper ways to organize and operate a warehouse. Topics include: warehousing principles, site selection, facility design, planning and decision-making processes, and inventory control.

**Prerequisite:** Program admission

**Sociology****SOCI 1101 | INTRODUCTION TO SOCIOLOGY (45-0-3)**

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.

**Prerequisite:** Appropriate Degree Level Writing (English) and Reading Placement Test Scores

**Spanish****SPAN 1101 | INTRODUCTION TO SPANISH LANGUAGE AND CULTURE I (45-0-3)**

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.

**Prerequisite:** Appropriate Placement Test Score

**Speech****SPCH 1101 | PUBLIC SPEAKING (45-0-3)**

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.

**Prerequisite:** Regular Admission or ENGL 0098

**Surgical Technology****SURG 1010 | INTRODUCTION TO SURGICAL TECHNOLOGY (60-150-8)**

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; assistant circulator role, professionalism as well as health care 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.)

**Prerequisite:** Program admission

**SURG 1020 | PRINCIPLES OF SURGICAL TECHNOLOGY (75-90-7)**

Provides continued study of surgical team participation by wound management and technological sciences for the operating room. Topics include: technological sciences; patient care concepts; preoperative, intraoperative and postoperative surgical technology; and perioperative case management. (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.)

**Prerequisites:** Program admission

**SURG 1080 | SURGICAL MICROBIOLOGY (30-0-2)**

Introduces the fundamentals of surgical microbiology. Topics include historical development of microbiology, microscopes, cell structures and theory, microbial function and classification, human and pathogen relationships, infectious processes and terminology, defense mechanisms, infection control and principles of microbial control and destruction.

**Prerequisites:** Program admission

**SURG 1100 | SURGICAL PHARMACOLOGY (15-30-2)**

Introduces the fundamentals of intraoperative pharmacology, and emphasizes concepts of anesthesia administration. Topics include: weights and measurements, drug conversions, interpretation of drug orders, legal aspects of drug administration, intraoperative pharmacologic agents, and anesthesia fundamentals.

**Prerequisites:** Program admission

**SURG 2030 | SURGICAL PROCEDURES I (60-0-4)**

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, and the Surgical Procedure.

**Prerequisites:** Program Admission

**SURG 2040 | SURGICAL PROCEDURES II (60-0-4)**

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, and the Surgical Procedure.

**Prerequisites:** Program Admission

**SURG 2110 | SURGICAL TECHNOLOGY CLINICAL I (0-135-3)**

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; processing of instruments and supplies; maintenance of a sterile field; and environmental sanitation. 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. Topics include: general surgery (to include gastrointestinal), cardiothoracic surgery, otorhinolaryngologic surgery ENT), ophthalmic surgery (Eye), genitourinary surgery, neurological surgery, obstetrical and gynecological surgery, oral and maxillofacial surgery, orthopedic surgery, peripheral vascular surgery, plastic and reconstructive surgery, and procurement/transplant surgery. The total number of cases the student must complete is 120. Students are required to complete 30 cases in the General Surgery specialty. Twenty of the cases must be in the First Scrub Role. Students are required to complete 90 cases in various surgical specialties. Sixty of the cases must be in the First Scrub Role and evenly distributed between a minimum of 5 surgical specialties. However, 15 is the maximum number of cases that can be counted in any one surgical specialty. Diagnostic endoscopy cases and vaginal delivery cases are not mandatory, but up to 10 diagnostic endoscopic cases and 5 vaginal delivery cases can be counted toward the maximum number of Second Scrub Role cases. Cases that are in the Observation role must be documented but do not count towards the minimum of 120 total cases.

**Prerequisites:** Program admission

**SURG 2120 | SURGICAL TECHNOLOGY CLINICAL II (0-135-3)**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include scrubbing, gowning, gloving, and draping, assistance with patient care, processing of instruments and supplies, maintenance of a sterile field and environmental sanitation. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation/participation in routine procedures and procedures for core and specialty surgery. Topics include general surgery, gastrointestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, otorhinolaryngologic surgery, plastic and reconstructive surgery, orthopedic surgery, ophthalmic surgery, oral and maxillofacial surgery, cardiothoracic surgery, peripheral vascular surgery, and neurosurgical procedures. Utilization of minutes allotted to specialty areas are at the

discretion of the program.

**Prerequisite:** Program Admission

**SURG 2130 | SURGICAL TECHNOLOGY CLINICAL III (0-135-3)**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include scrubbing, gowning, gloving, and draping, assistance with patient care, processing of instruments and supplies, maintenance of a sterile field and environmental sanitation. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation/participation in routine procedures and procedures for core and specialty surgery. Topics include general surgery, gastrointestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, otorhinolaryngologic surgery, plastic and reconstructive surgery, orthopedic surgery, ophthalmic surgery, oral and maxillofacial surgery, cardiothoracic surgery, peripheral vascular surgery, and neurosurgical procedures. Utilization of minutes allotted to specialty areas are at the discretion of the program.

**Prerequisite:** Program Admission

**SURG 2140 | SURGICAL TECHNOLOGY CLINICAL IV (0-135-3)**

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include scrubbing, gowning, gloving, and draping, assistance with patient care, processing of instruments and supplies, maintenance of a sterile field and environmental sanitation. In addition, introduces the development of surgical team participation through clinical experience. Emphasis is placed on observation/participation in routine procedures and procedures for core and specialty surgery. Topics include general surgery, gastrointestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, otorhinolaryngologic surgery, plastic and reconstructive surgery, orthopedic surgery, ophthalmic surgery, oral and maxillofacial surgery, cardiothoracic surgery, peripheral vascular surgery, and neurosurgical procedures. Utilization of minutes allotted to specialty areas are at the discretion of the program.

**Prerequisite:** Program Admission

**SURG 2240 | SEMINAR IN SURGICAL TECHNOLOGY (30-0-2)**

Prepares students for entry into careers as surgical technologists and enables them to effectively review for the national certification examination. Topics include professional credentialing, certification review, and test-taking skills.

**Prerequisite:** Program admission

**Veterinary Technology****VETT 1060 ANIMAL ANATOMY AND PHYSIOLOGY (45-45-4)**

Provides an overview of the functional anatomy and physiology of domestic animals commonly encountered in veterinary medicine. Topics include: musculoskeletal system, digestive system, cardiovascular system, integumentary system, hematopoietic system, respiratory system, urogenital system, nervous system, endocrine system and the special senses.

**Prerequisite:** Regular Admission

**Co-requisites:** Program Admission, BIOL 1111, BIOL 1111L

**VETT 1107 INTRODUCTION TO EQUINE CARE (30-60-4)**

This course will provide an introduction to equine care. Emphasis is placed on office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout. Topics include: office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout. Prerequisite: None

#### **VETT 1108 INTRODUCTION TO CANINE CARE (30-60-4)**

This course will provide an introduction to canine care. Emphasis is placed on office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout. Topics include: office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout.

Prerequisite: None

#### **VETT 1109 INTRODUCTION TO SMALL ANIMAL CARE (30-60-4)**

This course will provide an introduction to small animal care. Emphasis is placed on office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout. Topics include: office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout.

Prerequisite: None

#### **VETT 1100 INTRODUCTION TO LARGE ANIMAL CARE (30-60-4)**

This course will provide an introduction to large animal care. Emphasis is placed on office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout. Topics include: office procedures, care and nutrition, behaviors, handling and restraint, preventive medicine, and facilities design & layout.

Prerequisite: None

## **Welding**

#### **WELD 1000 | INTRODUCTION TO WELDING TECHNOLOGY (45-45-4)**

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.

Prerequisite: None

#### **WELD 1010 | OXYFUEL AND PLASMA CUTTING (45-45-4)**

Corequisite: WELD 1000 Introduction to Welding Technology Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating, oxyfuel cutting, and plasma cutting. Topics include: metal heating and cutting techniques, manual and automatic oxyfuel cutting techniques, oxyfuel pipe cutting, plasma torch and theory, plasma machine set up and operation, and plasma cutting techniques.

Prerequisites: None

Corequisite: WELD 1000 Introduction to Welding Technology

#### **WELD 1030 | BLUEPRINT READING FOR WELDING TECHNOLOGY (45-45-4)**

Corequisite: WELD 1000 Introduction to 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.

Prerequisites: None

Corequisite: WELD 1000 Introduction to Welding Technology

#### **WELD 1040 | FLAT SHIELDED METAL ARC WELDING (45-45-4)**

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 standard welds.

Prerequisites: None

Corequisite: WELD 1000 Introduction to Welding Technology

#### **WELD 1050 | HORIZONTAL SHIELDED METAL ARC WELDING (45-45-4)**

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.

Prerequisites: WELD 1000

#### **WELD 1055 | SHIELDED METAL ARC WELDING PIPE WELDS (15-90-3)**

This course explains how to set up shielded metal arc (SMAW) equipment for open-root V-groove welds on carbon steel pipe. This course aligns with select modules in NCCER Level III welding criteria.

Prerequisite: None

#### **WELD 1060 | VERTICAL SHIELDED METAL ARC WELDING (45-45-4)**

This course 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.

Prerequisites: WELD 1000

#### **WELD 1070 | OVERHEAD SHIELDED METAL ARC WELDING (45-45-4)**

This course 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.

Prerequisites: WELD 1000

#### **WELD 1075 | GAS TUNGSTEN ARC WELDING PIPE WELDING (15-120-4)**

This course explains how to prepare GTAW equipment for open-root V-groove welds on carbon steel and stainless steel pipe in all positions.

Prerequisite: None

**WELD 1090 | GAS METAL ARC WELDING (45-45-4)**

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.

**Prerequisites:** WELD 1000

**WELD 1095 | ADVANCED GAS METAL ARC WELDING (30-45-3)**

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas metal arc welding (GMAW). Qualification tests, in all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GMAW safety and health practices; shielding gases; metal cleaning procedures; GMAW machines and equipment set up; selection of filler rods; GMAW weld positions; and advanced production of GMAW beads, bead patterns, and joints.

**Prerequisite:** WELD 1000

**WELD 1110 | GAS TUNGSTEN ARC WELDING (45-45-4)**

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 evaluation 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.

**Prerequisites:** None

**Corequisite:** WELD 1000 Introduction to Welding Technology

**WELD 1120 | PREPARATION FOR INDUSTRIAL QUALIFICATION (45-45-4)**

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 codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

**Prerequisites:** WELD 1000

**WELD 1150 | ADVANCED GAS TUNGSTEN ARC WELDING (30-45-3)**

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.

**Prerequisite:** WELD 1000

**WELD 1151 | FABRICATION PROCESSES (30-30-3)**

Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

**Prerequisite:** WELD 1030

**WELD 1152 | PIPE WELDING (30-75-4)**

**Prerequisite:** WELD 1000

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 45 degree angle pipe (6G).

**WELD 1153 | FLUX CORED ARC WELDING (45-45-4)**

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.

**Prerequisite:** WELD 1000

**WELD 1156 | ORNAMENTAL IRON WORKS (45-45-4)**

Provides an introduction to ornamental ironworks with emphasis on safety practices, equipment and ornamental ironwork techniques. Topics include: introduction to ornamental ironworks and safety practices, use of scroll machine, and use of bar twister.

**Prerequisites:** WELD 1010, WELD 1030, WELD 1040, WELD 1090

**WELD 1330 | METAL WELDING AND CUTTING TECHNIQUES (15-45-2)**

This course provides instruction in the fundamentals of metal welding and cutting techniques. Instruction is provided in safety and health practices, metal fabrication preparation, and metal fabrication procedures.

**Prerequisite:** None

# Non-Credit Programs

## ADULT EDUCATION

Adult education programs help adult learners acquire the basic skills of reading, writing, computation, speaking, and listening that are necessary to compete successfully in today's workplace, strengthen family foundations, and exercise full citizenship. Educational services are responsive to the individual needs of undereducated students. Learning experiences are focused on streamlining adult education across systems in order to shorten the time between a attaining a GED® diploma and a stackable college credential.

Educational programs and services are accessible and flexible, responsive to the individual needs of students, aligned with agencies to help students overcome barriers, and linked to building the workforce needed to support our community's economic and development plan.

For information on admissions requirements, locations, volunteer opportunities, and news, please visit [www.centralgategatech.edu/adult-education](http://www.centralgategatech.edu/adult-education).

### Programs and Services

#### Accelerating Opportunity

This program is designed to provide students with a fast-paced learning experience that combines GED test preparation and courses, selected from specific programs due to workforce demand, to attain a technical certificate of credit (TCC) within one/two semesters. Support services for application and admissions, entrance exam preparation, financial aid, registration, and career planning are available for all students transitioning into college classes.

#### English Literacy/Civics

Designed for adults with limited or non-English speaking skills, classes provide English language instruction and additional skills necessary for students to live and work in Georgia, as well as obtain U.S. citizenship. Various levels of instruction, from basic literacy to advanced skills, are Offered:.

#### Other Instruction

instruction is provided to assist with basic skills review, work ethics, soft skills, college and career readiness, and digital literacy.

#### Test Preparation

Free pre-GED® and GED®, ASVAB, and ACCUPLACER test preparation classes are Offered:.. Students that have attained their GED® diploma during the academic year are invited to participate in the College's annual commencement ceremony, held in May of each year.

## ECONOMIC DEVELOPMENT

CGTC's Office of Economic Development serves Georgia's new, expanding, and existing industries through the delivery of customized training and development of solutions to the challenges facing Georgia's businesses. We are especially focused on the development of a skilled workforce that will meet the needs of businesses in the communities CGTC serves.

### Business and Industry Services

CGTC provides customized training, certification and licensure courses, and the rental of training and meeting facilities. CGTC is the local authorized approval agency for the Georgia Retraining Tax Credit Program and an authorized ACT Work Keys® service center.

### Continuing Education

Lifelong learning opportunities are Offered: through a broad spectrum of non-credit courses, workshops, and seminars developed in response to input from individuals and the business community. Classes are available in person and online.



# About CGTC

# ABOUT CGTC

## Mission Statement

Central Georgia Technical College, a unit of the Technical College System of Georgia, offers credit instruction, adult education, and customized business and industry training through traditional and distance education delivery designed to promote community and workforce development.

## Philosophy

Consistent with its Mission, as presented by its faculty and staff, Central Georgia Technical College affirms the following philosophy that it is the College's responsibility to:

- deliver globally competitive programs and services which promote open access points and student success;
- provide quality instruction through accessible programs and services;
- improve awareness of the received value and support for technical education, adult education, and economic and workforce development through expanded financial resources;
- provide quality business and industry training to build a competitive workforce and enhance the economic vitality of the communities served.

## Vision

It is the vision of Central Georgia Technical College to lead a system of technical colleges in providing technical education, adult education, and customized business and industry training to meet the workforce needs of the future, focusing on preparation for emerging and transforming careers. CGTC will continuously infuse innovative technology and business practices into occupational and adult education, economic development workforce services, and student support services to remain responsive to the evolving needs of the communities we serve.

The College's challenging, personalized, web enhanced learning environment will continue to provide rigorous training opportunities of sound quality resulting in a well-qualified, highly trained, knowledgeable workforce.

## Values

Integrity is an intrinsic value of Central Georgia Technical College. The College is committed to providing all stakeholders with equal access to quality programs and services that enhance student learning and success.

## History

CGTC was officially established to conduct business by the State Board of the Technical College System of Georgia (TCSG) in September 2012, when the Board approved the consolidation of Middle Georgia Technical College (est. 1973) and Central Georgia Technical College (est. 1962). In June 2013, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Board of Trustees approved CGTC's continuance as an accredited institution with Level I status, granting associate degrees. The consolidated College officially began doing business as Central Georgia Technical College on July 1, 2013.

CGTC serves eleven counties in Georgia: Baldwin, Bibb, Crawford, Dooly, Houston, Jones, Monroe, Peach, Pulaski, Putnam, and Twiggs. Campuses are located in Warner Robins (Houston), Macon (Bibb), and Milledgeville (Baldwin). Instructional Centers are located in Eatonton (Putnam), Forsyth (Monroe), Gray (Jones), Hawkinsville (Pulaski), and Roberta (Crawford). Although assigned a specific service area by TCSG, CGTC offers distance education opportunities through on-line and hybrid instruction.

The consolidated College operates 1,076,572 square feet of State owned or leased existing facility space.

CGTC offers associate degrees, diplomas, and technical certificates of credit in areas of Aerospace, Trade and Industry; Business and Computer Technologies; Health Sciences; Public Safety; Professional Services; and General Studies. The College also offers continuing education classes and economic development services. CGTC, in the tradition of the individual Colleges, will continue to contribute to economic and workforce development throughout the State of Georgia.

## Accreditation

Accreditation processes are coordinated by the Vice President for Institutional Effectiveness, who may be reached by calling (478) 757-3424. Complete information regarding CGTC's accreditation is available at [www.centralgatech.edu/accreditation](http://www.centralgatech.edu/accreditation).

Central Georgia Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate degrees, diplomas, and technical certificates of credit. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of Central Georgia Technical College.

The Commission on Colleges is to be contacted only if there is evidence that appears to support an institution's significant non-compliance with a requirement or standard.

## Board of Directors

CGTC is governed by the State Board of the Technical College System of Georgia (TCSG). Established by the Georgia Legislature, the State Board members are appointed by the Governor. The State Board is responsible for establishing standards, regulations, and policies for the operation of TCSG's colleges. The State Board's roster, meeting dates, and meeting minutes are published at [www.tcsg.edu/about-tcsg/state-board](http://www.tcsg.edu/about-tcsg/state-board).

The powers of the State Board are established in O.C.G.A. § 20-4-11, to include the power to establish local Boards at each College. The local Board interprets State Board policies and procedures, and may establish local policies to guide the operation of CGTC. The local Board of Directors interprets State Board policies and provides supplemental policies to ensure that the needs of the citizenry, business, and industry in the CGTC's service area are met to the highest possible degree and in the most cost effective and efficient manner, within the guidelines of the policies and goals and objectives of the State Board of TCSG.

The guiding policies of the local Board, subject to change from time to time, shall be in accordance with the established objectives, the trusteeship to the public, and the policies of TCSG.

## Advisory Committees

Each instructional program has an advisory committee which consists of business leaders who counsel and guide instructors to maintain quality programs and educational training standards. These committees provide advice for programs of study, make recommendations for improvement to meet employment standards within the occupation, and advise and assist in conducting community surveys, course planning, laboratory planning, recruitment of teachers, assistance to teachers, placement of students, and public relations.

## COLLEGE DIVISIONS

### Academic Affairs

Responsible for all associate degree, diploma, and technical certificate credit academic programs, as well as the library and student tutoring support services. Evaluation of prior learning assessment is also facilitated through this division.

### Administrative Services

Responsible for management and operation of accounting, budgeting and financial reporting; inventory and asset management; purchasing; and application of federal guidelines and regulations.

### CGTC Foundation

The CGTC Foundation is a nonprofit, 501(c)3 organization that supports the College in its mission. The Foundation strives to promote community

awareness of the benefits offered by the College and to supplement available resources through private funding for capital expansion and improvements, equipment, staff and faculty development, and endowments. The CGTC Foundation is governed by a local Board of Trustees, which cultivates and coordinates cash, grants and other funding, and property from industry, business, foundations, and friends of CGTC.

### Adult Education

Responsible for adult basic education and literacy, English literacy and civics, test preparation, and the administration of the GED® testing program.

### Economic Development

Responsible for customized training, business and industry programs, rental of meeting facilities, and continuing education.

### Executive

#### Facilities and Ancillary Services

Oversees property expansion, construction, and renovation; facilities, grounds, and landscape maintenance; custodial services; and public safety.

#### Georgia Veterans Education Career Transition Resource (VECTR) Center

Serves as Georgia's one-stop-shop for veterans, and their family members, who are seeking educational and employment assistance, accelerated training opportunities, and connection to the vital state and community resources required to transition from military service and successfully enter the civilian workforce. The Georgia VECTR Center provides career counseling, educational coaching, workforce training, benefits counseling, and connection to community resources.

### Global Initiatives

Directs the development and implementation of new educational and training partnership opportunities beyond the border of the United States.

### Human Resources

Responsible for the recruitment, onboarding, compensation and benefits, employee relations, labor law, and policy compliance for all college personnel.

### Re-entry Programs

Provides vocational training services at Georgia Department of Corrections facilities. Services are provided to offer offenders an opportunity to increase post-release employability.

### Technology

Supports technology resources including audio-visual equipment, computer hardware and software, email, and telecommunications. Also maintains enterprise information systems and the network infrastructure, and provides website and server administration.

## Institutional Effectiveness

Responsible for coordination and oversight of evaluation and planning processes that support mission fulfillment, quality assurance, and adherence to accreditation principles. Research and evaluation responsibilities are conducted to support collegiate planning, policy formation, and decision-making.

## Office of the President

Supports the educational, economic, and community development missions of the College. Guides executive leadership to ensure that academic and technical education, student support services, business and industry services, continuing education, and adult education services are held to the highest standards.

## Satellite Operations

Provides oversight, administration, and support to the Milledgeville campus and to instructional centers.

## Student Affairs

Facilitates campus life programs; career services; financial aid; enrollment services; high school initiatives; marketing and public relations; registrar services; recruitment; special populations services; student advisement; student communications; student conduct, appeals, and compliance; and testing. The Communications Center and Titans athletics programs are housed within the Office of Student Affairs.

# DISCLOSURES

In accordance with the Higher Education Opportunity Act of 2008, CGTC provides certain information to the College community. This information is available online at [www.centralgatech.edu/ie/consumer-information](http://www.centralgatech.edu/ie/consumer-information).

## Gainful Employment

The Higher Education Opportunity Act of 2008 was designed with the intent to help students and families make better informed decisions about higher education. In accordance with this federal law, CGTC provides information regarding program costs, graduation rates, job placement, and other information about our programs Offered at our institution to the College community.

## Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act (FERPA) was designated to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide the guidelines for the correction of inaccurate or misleading data through informal and formal hearings. CGTC fully complies with this act; as such, students have the right to:

1. Inspect and review their education records; and
2. Request changes to their education records that

they believe are inaccurate, misleading or in violation of the student's privacy rights; and

3. Consent to disclosure of personally identifiable information from their education records, except to the extent FERPA and 99.31 allows disclosure without consent; and
4. File a complaint with the Department of Education about the institution's alleged failure(s) to comply with FERPA under §99.63 and 99.64.

Students also have the right to file complaints with FERPA concerning alleged failure by the College to comply with the Act. Directory information will be treated as public information and will generally be available on all students and former students at the discretion of the College.

As defined by The Solomon Amendment, directory information includes the following: The student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, height, weight, age, hometown, hobbies, dates of attendance, degrees, honors, awards applied for and/or received, and previous educational institutions attended by the student.

## Statement of Equal Opportunity

Central Georgia Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, programs financed by the federal government including any 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 contracting for goods and services.

Central Georgia Technical College 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 person has been designated to handle inquiries regarding the nondiscrimination policies: The Title IX/Section 504/ADA Coordinator for CGTC nondiscrimination policies is Cathy Johnson, Executive Director of Conduct, Appeals & Compliance; Room A-136, 80 Cohen Walker Drive, Warner Robins, GA 31088; Phone: (478) 218-3309; Fax: (478) 471-5197; Email: [cjohnson@centralgatech.edu](mailto:cjohnson@centralgatech.edu).

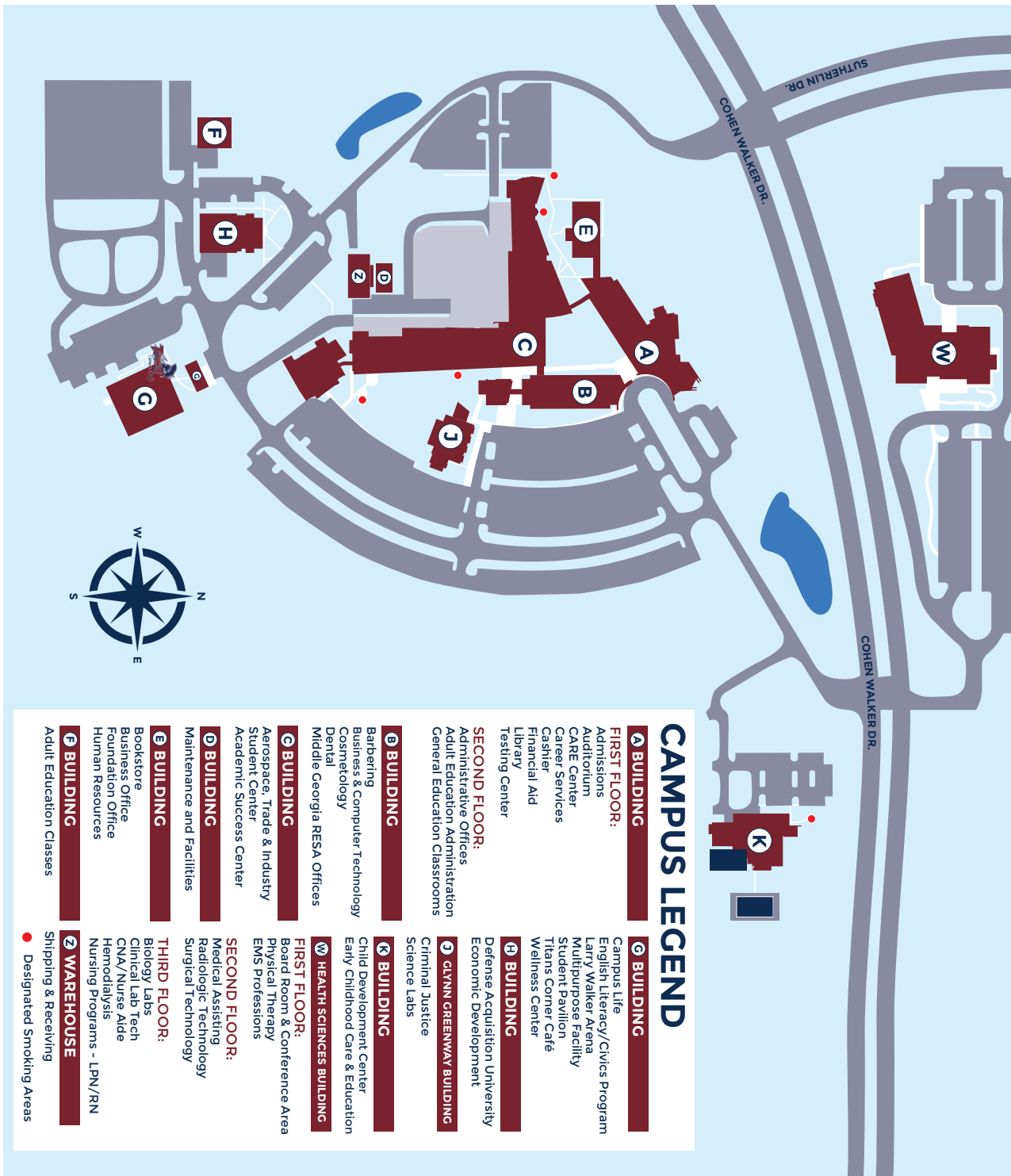
## TCSG Warranty

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

has demonstrated the knowledge and skills, and can perform each competency as identified in the industry-validated standards. Any program graduate who is determined to lack such competence shall be retrained at no cost to the employer or the graduate for tuition or instructional fees.

A Warranty claim 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 contained in the industry-validated standards, including failure to pass a State of Georgia required licensing examination or national licensing examination.

This warranty is applicable only to graduates of a technical certificate of credit, diploma, or degree program who entered the program subsequent to the mandated standards implementation date. 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. [TCSG Policy 5.1.7.]



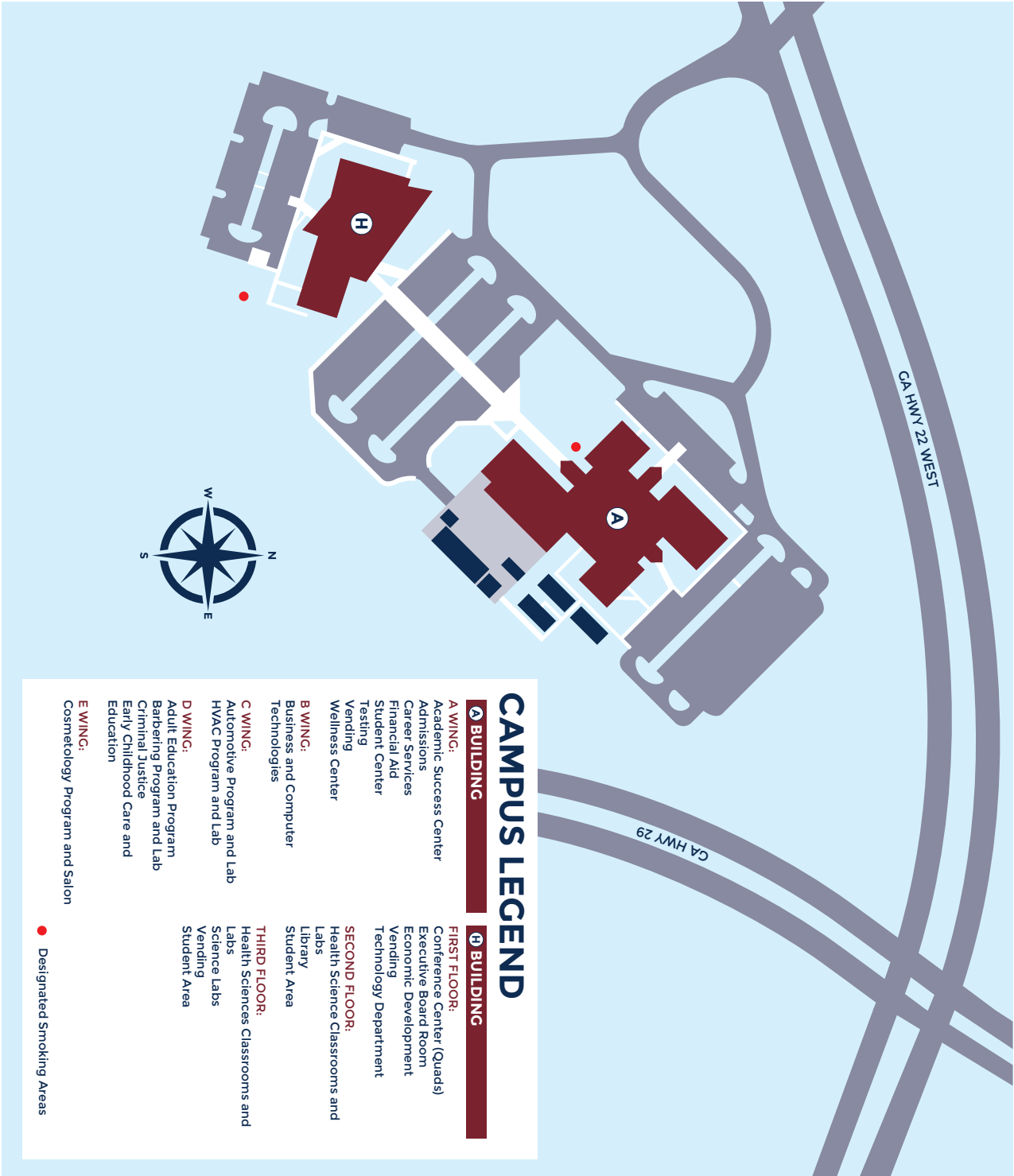
## CAMPUS LEGEND

- A BUILDING**  
**FIRST FLOOR:**  
 Admissions  
 Auditorium  
 CARE Center  
 Career Services  
 Cashier  
 Financial Aid  
 Library  
 Testing Center
- B BUILDING**  
 Barbering  
 Business & Computer Technology  
 Cosmetology  
 Dental  
 Middle Georgia RESA Offices
- C BUILDING**  
 Aerospace, Trade & Industry  
 Student Center  
 Academic Success Center
- D BUILDING**  
 Maintenance and Facilities
- E BUILDING**  
 Bookstore  
 Business Office  
 Foundation Office  
 Human Resources
- F BUILDING**  
 Adult Education Classes
- G BUILDING**  
 Campus Life  
 English Literacy/Civics Program  
 Larry Walker Arena  
 Multipurpose Facility  
 Student Pavilion  
 Titans Corner Café  
 Wellness Center
- H BUILDING**  
 Defense Acquisition University  
 Economic Development
- I GYNN GREENWAY BUILDING**  
 Criminal Justice  
 Science Labs
- J BUILDING**  
 Child Development Center  
 Early Childhood Care & Education
- K HEALTH SCIENCES BUILDING**  
**FIRST FLOOR:**  
 Board Room & Conference Area  
 Physical Therapy  
 EMS Professions  
**SECOND FLOOR:**  
 Medical Assisting  
 Radiologic Technology  
 Surgical Technology
- L BUILDING**  
**THIRD FLOOR:**  
 Biology Labs  
 Clinical Lab Tech  
 CNA/Nurse Aide  
 Hemodialysis  
 Nursing Programs - LPN/RN
- M WAREHOUSE**  
 Shipping & Receiving  
 Designated Smoking Areas



## CAMPUS LEGEND

<b>A BUILDING</b> President's Office Human Resources Foundation	<b>G BUILDING</b> Classrooms and labs Vending Area Wellness Center	<b>I BUILDING</b> Arts and Sciences Classrooms Arts and Sciences Labs Center for Professional Development Economic Development Library
<b>B BUILDING</b> Classrooms and labs	<b>H BUILDING</b> Auditorium Health Technology Classrooms Health Technology Labs Vending Area	<b>J BUILDING</b> Business Office Professional Testing Center Student Affairs Vending Area
<b>C BUILDING</b> Classrooms and labs	<b>K BUILDING</b> Adult Learning Center	<b>L BUILDING</b> Bookstore Career Services
<b>D BUILDING</b> Academic Success Center Classrooms and labs	<b>M BUILDING</b> Charles H. Jones Advanced Technology Center	<b>N BUILDING</b> T1 Estheticians Lab
<b>E BUILDING</b> Classrooms and labs Hangar/Lab	<b>O BUILDING</b> T4A Weatherization Lab	<b>P BUILDING</b> T5-T8 Modular Classroom Building
<b>F BUILDING</b> Classrooms and labs	<b>Q BUILDING</b> Shipping and Receiving	<b>R BUILDING</b> Public Safety Building
<b>G BUILDING</b> Classrooms and labs	<b>S BUILDING</b> Public Parking (except where indicated)	<b>T BUILDING</b> Restricted Parking
<b>H BUILDING</b> Auditorium Health Technology Classrooms Health Technology Labs Vending Area	<b>U BUILDING</b> Facilities Operations	<b>V BUILDING</b> Bus Stops
<b>I BUILDING</b> Arts and Sciences Classrooms Arts and Sciences Labs Center for Professional Development Economic Development Library	<b>W BUILDING</b> Carpentery Program Worksite	<b>X BUILDING</b> Early Childhood Playground
	<b>Y BUILDING</b> Designated Smoking Areas	



## CAMPUS LEGEND

### A BUILDING

**A WING:**  
 Academic Success Center  
 Admissions  
 Career Services  
 Financial Aid  
 Student Center  
 Testing  
 Vending  
 Wellness Center

**B WING:**  
 Business and Computer  
 Technologies

**C WING:**  
 Automotive Program and Lab  
 HVAC Program and Lab

**D WING:**  
 Adult Education Program  
 Barbering Program and Lab  
 Criminal Justice  
 Early Childhood Care and  
 Education

**E WING:**  
 Cosmetology Program and Salon

### B BUILDING

**FIRST FLOOR:**  
 Conference Center (Quads)  
 Executive Board Room  
 Economic Development  
 Vending  
 Technology Department

**SECOND FLOOR:**  
 Health Science Classrooms and  
 Labs  
 Library  
 Student Area

**THIRD FLOOR:**  
 Health Sciences Classrooms and  
 Labs  
 Science Labs  
 Vending  
 Student Area

● Designated Smoking Areas





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