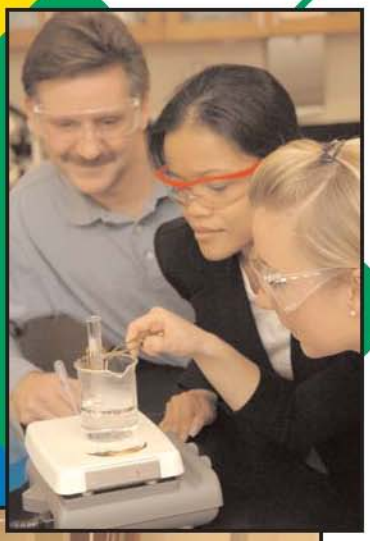
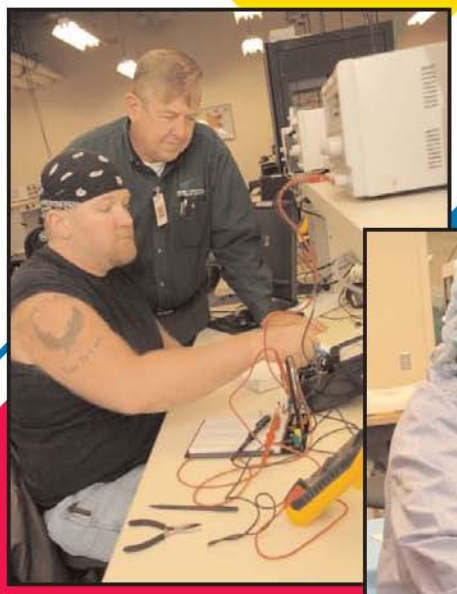
West Central Technical College

Student Catalog

2007-2008





www.westcentraltech.edu

Welcome to West Central Technical College!

Dear Student,

Welcome to West Central Technical College—a place dedicated to helping you achieve the highest level of educational excellence as well as career advancement and placement. Our 2008 catalog gives you the latest curriculum information. West Central offers more than 90 certificate, diploma and associate degree programs that can enhance your quality of life and expand the skills that you need to succeed. In addition, we offer flexible hours, multiple campus sites, and the latest in technology for improved training.

At West Central, the focus is on your success in today's ever-changing, technically enhanced, state-of-the-market economy. Our faculty and staff believe in providing the highest quality services and instruction to ensure an exciting learning experience. Our instructors are qualified and dedicated to the responsive changes needed by business and industry, students, and the community. We are proud to train citizens for the technical careers of today's workforce.

Thank you for choosing West Central Technical College for your education, retraining, or career advancement needs. Please visit any of our campus locations in Carroll, Coweta, Douglas, and Haralson counties, or visit us on the web at www.westcentraltech.edu and get to know us better.

Dr. Skip Sullivan, President

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General Information

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

West Central Technical College is accredited by the Commission on Colleges (COC) of the Southern Association of Colleges and Schools (SACS), 1866 Southern Lane, Decatur, Georgia 30033-- phone: 404.679.4501-- to award certificates, diplomas, and associate degrees.

Programs accredited by individual associations include Dental Hygiene, by the American Dental Association; Radiologic Technology, by the American Registry of Radiologic Technologists; Licensed Practical Nursing, by the Georgia Board of Licensed Practical Nurses; Medical Assisting, by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE); Medical Laboratory Technology, by the National Accrediting Agency for Clinical Laboratory Sciences; Surgical Technology, by the Commission on Accreditation of Allied Health Programs (CAAHEP); Associate Degree Nursing by the Georgia Board of Nursing; Cosmetology, by the Georgia Board of Cosmetology; and Automotive, by Automotive Service Excellence (ASE).

West Central Technical College is a unit of the Technical College System of Georgia.

The Department of Technical and Adult Education and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, disabled veteran, veteran of the Vietnam Era, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all educational programs and activities including admissions policies, scholarship and loan programs, athletic and other Department- and Technical College-administered programs. It also encompasses the employment of personnel and contracting for goods and services. The Department and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

Equity (Title IX) coordinator, Vice President for Student Affairs, ***770.537.5729***
176 Murphy Campus Blvd., Waco, GA 30182

ADA (Section 504) coordinator, Vice President for Administrative Services, ***770.537.5707***
176 Murphy Campus Blvd., Waco, GA 30182

Disabilities Services, Coordinator for Special Needs, ***770.537.5727***
176 Murphy Campus Blvd., Waco, GA 30182

Telephone Directory

Academic Affairs	770.537.7979
Admissions	770.537.5740
Adult Education/GED	770.838.3192
Bookstore	
Carroll	770.836.6102
Douglas	770.947.7229
Murphy	770.537.5732
Campuses	
Carroll Campus	770.836.6800
Coweta Campus	678.423.2000
Douglas Campus	770.947.7300
Murphy Campus	770.537.6000
Career Resource Center	770.824.5243
Continuing Education	770.537.7942
Cosmetology	
Carroll	770.836.6826
Coweta	678.423.2000
Murphy	770.537.6054
Financial Aid	770.537.5740
Human Resources	770.537.5731
Library	
Carroll	770.836.4711
Douglas	770.947.7238
Murphy	770.537.6066
Public Relations/Marketing	770.537.5756
Registrar	770.537.5740
Student Affairs	770.537.5740

WCTC Website	www.westcentraltech.edu

FY 2008 Academic Calendar

Summer 2007

4-Jul	Holiday-Independence Day
9-Jul	Late Student Registration
10-Jul	Classes Begin
10, 11-Jul	Drop/Add
19-Jul	Graduation
13-Aug	Midpoint
13-23-Aug	Returning Student Registration
20-Aug	Open Registration Begins
3-Sep	Holiday-Labor Day
19-Sep	Classes End
20-Sep	Final Exams
21-Sep	Open Registration Ends, 5 p.m.

Fall 2007

1-Oct	Late Student Registration
2-Oct	Classes Begin
2, 3-Oct	Drop/Add
11-Oct	Graduation
5-Nov	Midpoint
5-15 Nov	Returning Student Registration
12-Nov	Open Registration Begins
22-Nov	Holiday-Thanksgiving
23-Nov	Holiday-Robert E. Lee's Birthday
12-Dec	Classes End
13-Dec	Final Exams
14-Dec	Open Registration Ends, 5 p.m.

Winter 2008

7-Jan	Late Student Registration
8-Jan	Classes Begin
8-9-Jan	Drop/Add
17-Jan	Graduation
21-Jan	Holiday-MLK, Jr. Birthday
12-Feb	Midpoint
11-21-Feb	Returning Student Registration
18-Feb	Open Registration Begins
19-Mar	Classes End
20-Mar	Final Exams
21-Mar	Open Registration Ends, 5 p.m.

Spring 2008

7-Apr	Late Student Registration
8-Apr	Classes Begin
8-9-Apr	Drop/Add
12-May	Midpoint
12-22-May	Returning Student Registration
19-May	Open Registration Begins
26-May	Holiday-Memorial Day
18-Jun	Classes End
19-Jun	Final Exams
20-Jun	Open Registration Ends

Summer FY 2009

7-Jul	Late Registration
8-Jul	Classes begin

Board Members

WCTC Board of Directors

Fred O'Neal, Chairman
Janice Thompson, Vice Chair
Michael Bass
Lynn Clarke
Bill Hightower
Daniel Jackson
Malcolm Jackson
Mike Lee
Dennis McEntire
Robert Reynolds
Kyle Williamson
Dr. Peter Worthy

WCTC Foundation Board of Trustees

Edward Fowler, President
Robin Worley, Vice President
Jim Eason, Treasurer
Dr. Robert Anthony
Kali Boatright
Anita Buffington
Julian Carter, Jr.
Randy Eaves
Jimmy Haddle
Bryant Hightower
Steven Fiesler
Rick Hayden
Vicki Kaiser
David Keeler
Susan Lester
Jim Mottola
Melvin Samuels
Alan Smith
Larry Steed
Leonard Woolsey
Dr. Skip Sullivan, ex-officio
Dawn Cook, ex-officio
Mark Whitlock, ex-officio

State Board of Technical and Adult Education

Harold R. Reynolds, Chair
Warren Rhubarb Jones, Vice-Chair
Ron Jackson, Acting Commissioner
Jimmy Allgood
George L. Bowen, III
Don L. Chapman
Ben Copeland
Michael Daniel
Sharon H. Douglas
Mary Paige Flanders
Cedric J. Johnson
Debra Lyons
Alma Noble
Tyre Louis Rakestraw, Jr.
Sandra B. Reed
Allen C. Rice
Steve Rieck
Jimmy Tallent
Ben J. Tarbutton, Jr.

Our Commitment to You

West Central Technical College is committed to providing excellence in both physical facilities designed for the learner and qualified faculty prepared to work with students. We believe in the partnership between faculty and students sharing the responsibility for learning.

Our Mission

Our Mission is to lead economic and workforce development by offering students aged 16 and above learning opportunities through quality technical education programs and services. These opportunities focus on the development of academic and technical competence; critical thinking skills; social, personal and intellectual values; and an understanding of society. These services of West Central Technical College include adult literacy, continuing education and corporate training as well as technical associate degree, diploma and certificate programs.

Our Vision

West Central Technical College is built upon the full participation of individual citizens, the collaboration of business, industry, social service providers, health care providers and education groups, and the best possible use of human, financial, and natural resources.

As West Central strives to promote individual student development and to improve the quality of life in an increasingly multicultural community, the effectiveness of West Central's educational programs and services shall be measured against the following standards:

1. offering affordable and accessible credit and non-credit programs;
2. enhancing the economic well-being of regional business, industry and their employees;
3. adapting programs in response to changing societal, business, and industry needs;
4. providing state-of-the-art technology, educational resources and training; and
5. maintaining student success as the primary measure on which West Central is evaluated.

Our Core Values

West Central Technical College believes in the value of integrity, professionalism, excellence, and student centeredness in all aspects of our programs, services, and operations. Theses core values are fundamental to the success of West Central Technical College in realizing our mission and vision.

- **Integrity:** Our actions and words signal the institutional integrity of our college. We embrace honesty and base our decision making on a foundation of high ethical standards and practical considerations.
- **Professionalism:** We foster respect and truth through exhibiting ethical standards in a courteous and conscientious manner.
- **Excellence:** We exhibit high quality by meeting or exceeding the needs and expectations of our students and the community. We promote exceptional performance by recognizing and rewarding excellence in our students, faculty, staff, and community.
- **Student Centeredness:** We value and respect all students as unique individuals. We assist students in realizing their educational goals and continually strive to create a dynamic learning environment which includes them as stakeholders in their own learning.

Our Role and Scope

West Central Technical College provides opportunities for students seeking postsecondary technical education. The services and programs offered include the following:

Administrative Services areas of the College provide effective leadership by setting the tone and direction of the institution, as well as providing resources, qualified personnel, and facilities, thus allowing West Central employees to carry out their duties.

Adult Education programs provide individuals a variety of locations and times to take advantage of training in reading, math and other basic skills. Classes prepare students for the General Educational Development (GED) Tests, allow students to improve their English language skills in English Literacy Programs (formerly English as Second Language or ESL), and equip students to function effectively in the workplace.

Advisory Committees, composed of representatives from business and industry, meet with school faculty to make recommendations, offer suggestions, and assist in the evaluation of each training program. Input from community representatives ensures that West Central's programs and skills remain relevant to workforce needs.

Career Placement Services personnel assist students with locating sources for employment, setting up interviews, following up the interview process, securing internships and cooperative work experiences.

Continuing Education offerings provide skills upgrading areas of technical, computer, and other related proficiencies, as well as training for new and interesting occupations in the technical, computer, medical, and clerical fields. Courses are offered to assist in professional development and a wide variety of enrichment courses in areas of personal interest and health. Participants may also earn Continuing Education Units (CEUs) for noncredit courses and seminars.

Corporate Training can assist the business and industry community by designing, developing, and delivering customized training programs. We can conduct quality training on-site at a business or at one of the four campus locations for a reasonable cost that will result in value-added employees for your business. Participants may also earn Continuing Education Units (CEUs) for noncredit courses and seminars.

Distance Learning programs provide activities and services including credit/noncredit and continuing education instruction, video teleconferencing, interactive multimedia, online courses, and other instructional delivery technologies.

Economic Development programs assist local chambers of commerce, development authorities, and other groups in promoting economic development in Carroll, Coweta, Douglas, and Haralson counties through Quick Start projects for new and expanding industries and customized training for all industries.

Educational Degree, Diploma, and Certificate programs provide technical and general education skills required for employment and career growth. Graduates earn Associate in Applied Science degrees, technical diplomas, and technical certificates of credit.

Institutional Advancement activities communicate the College's programs and services to both internal and external audiences.

Institutional Effectiveness efforts provide continuous planning, reviewing, and evaluating of the College's progress in meeting accreditation needs and the needs of our region's citizens.

Learning Support programs help students improve their academic and personal preparedness for postsecondary level study.

Library Services and facilities provide printed, audio-visual, and electronic materials that aid students in the pursuit of education, information, and/or research.

Special Needs and Counseling Services are provided to the student with a disability or who exhibits an economic or academic disadvantage. This includes, but is not limited to, setting realistic goals, developing individual programs of study, providing job orientation, providing assistance in determining the degree and nature of disability and/or disadvantage, and providing referrals to appropriate offices or agencies for assistance. Students may contact Student Services for assistance with accommodations for a disability, academic, or economic need.

Student Affairs offices provide services and activities to support the transition into higher education, maximize chances for success, and enhance the potential for personal and educational growth of the individual.

Technical Support operations provide computing services and learning resources hardware and software support to West Central's educational programs and administrative areas of the College.

Tutoring Services are available on the Douglas, Carroll, Coweta, and Murphy campuses for students taking reading, English, mathematics, science, or introductory computer courses. Please check in each campus Learning Resources Lab for hours and sign-up sheets.

Our History

West Central Technical College (originally Carroll County Area Vocational Technical Institute, and later Carroll Technical Institute), a unit of the Georgia Department of Technical and Adult Education, began operation in September 1968 after a resolution to build and operate a technical-vocational school was approved by the Carroll County Board of Education in February 1966.

The school opened with approximately 125 students in 11 occupational programs, including Accounting, Automobile Mechanics, Clerk-Typist, Cosmetology, Drafting, Electrical Construction and Maintenance, Machine Shop, Mechanical Engineering Technology, Practical Nursing, Secretarial Science and Welding. The first classes graduated in September 1969.

In 1976, plans were implemented to enlarge the institution; the new addition was completed in the fall of 1977. West Central then consisted of three adjacent buildings with 78,000 square feet of floor space. In FY85, the General Assembly approved funds to complete construction of the basement of the most recent addition.

On July 1, 1987, West Central became a state-governed institution under the jurisdiction of the State Board of Postsecondary Vocational Education. A local Board of Directors was appointed to give community input into the operation of the institution. Also in 1987, construction for West Central's Industrial Training Center was completed. This facility added 12,654 square feet of much-needed classroom and training space.

Program curricula have changed continuously to reflect the needs of an ever-changing community. Programs have been closed and new ones added, resulting in certificate, diploma, and associate degree programs in more than 90 occupational areas.

A campus in Douglas County was approved by the State Legislature, and construction began in December 1993. Completed in September 1995, the Douglas campus is located on a 43-acre site, with three separate buildings totaling 82,670 square feet. Facilities include an instructional building and a conference center with office space.

Central Educational Center (CEC), West Central's Coweta campus, is a partnership among West Central, Coweta County schools, and local businesses. In the fall of 2002, West Central began offering a full range of services at CEC, including adult education, continuing education, credit courses for high school and adult students, and business and industry training.

In June of 2000, West Central opened the Career Resource Center in Haralson County. The center provides job seekers with various employment, training and educational resources. State agencies partner with the college to provide services in workforce development.

On July 8, 2002, classes began at the Murphy campus located in Waco, Georgia. West Central's newest facility, the campus is 180,000 square feet, sits on 90 acres of land, and includes classroom and lab space, administrative offices, a bookstore, a library, student center, and a 12,000 square foot state-of-the-art conference center. The campus was officially recognized as the Thomas B. Murphy campus on April 12, 2002 at the Haralson County Chamber of Commerce's thirteenth annual meeting. It was dedicated to Mr. Tom Murphy, who at that time was Speaker of the Georgia House of Representatives, in honor of his loyal service to Georgia citizens and for his unwavering support of technical and adult education in the state.

West Central's newest venture, the College and Career Institute (CCI), is a collaboration between West Central, the Douglas County Board of Education, and the business community in Douglas County. The CCI is scheduled to open in the summer of 2009 and will offer dual enrollment opportunities for Douglas County students as well as traditional programs of study, adult education, and continuing education services to support the needs of a growing county.

Change is an ever-present factor in the formula for growth at West Central Technical College. The faculty and staff are committed to providing technical education that is responsive to the changing needs of business and industry, students, and the community at large.

Admissions

Admissions Policy

Students are admitted on a first-to-qualify/space available basis except for Health Services programs. Admission to Health Services diploma and degree programs is based on a competitive selection process. There are minimum requirements for admission to individual Health Services programs, and meeting minimum requirements does not guarantee admission to the program.

The admissions policy of the State Board of Technical and Adult Education is intended to assure the nondiscriminatory processing of the application for admission to any technical college by any adult citizen of Georgia 16 years of age or older who seeks access to quality instruction designed to develop his or her capabilities to the maximum.

Admissions Procedures for Credit Programs

1. Complete and submit application for admission with a one-time nonrefundable $25 fee.
2. Submit an official high school or GED transcript. Please refer to High School Diploma/GED Requirements section. Certain identified certificate programs do not require a high school diploma or GED.
3. If you have previously attended college/technical school, submit an official transcript from each college/technical school attended.
4. If you have taken a SAT, ACT, CPE, ASSET or COMPASS college placement test within the last five (5) years, submit your official test scores.
5. Complete ASSET or COMPASS placement testing. Applicants who submit official placement test scores or college transcripts may not be required to test with West Central if the previous test scores or course completion meet program placement requirements.
6. The Office of Student Affairs will notify applicants by letter of acceptance status.
7. Applicants to diploma and degree Health Services programs must complete a competitive selection process prior to admission to the desired diploma or degree program. Applicants may choose to be institutionally accepted to begin taking required core classes or they may choose to be admitted to the Health Care Assistant certificate program. Please refer to the Additional Procedures for Diploma and Associate Degree Level Health Services Programs section of this catalog for additional information.

Admissions Requirements for Applicants

Age

Applicants must be 16 years of age or older for college admission. The minimum age for admission in certain programs is greater than 16 years of age.

High School Diploma/GED Requirements

A high school diploma or GED will not be required for admission to the College or to a program unless specified by program standards. All degree and diploma programs, and selected certificate programs, require a high school diploma or GED prior to program admittance. There are selected certificate programs that have no high school diploma or GED requirement.

High school diplomas must have been awarded by a secondary school that is accredited by an agency included in the Georgia Department of Technical and Adult Education's list of recognized accreditation agencies.

Students completing a secondary program of study that is not accredited by a recognized accrediting agency may be considered for admission only if the following criteria are met:

- Applicant must submit minimum SAT scores, recent within the last five years, of Verbal 430 and Math 400 for diploma & certificate programs or Verbal 460 and Math 440 for associate degree programs.
- Applicant must meet minimum program placement scores by taking the ASSET or COMPASS placement test with West Central.
- Applicant must have no learning support course requirements.

Placement Testing

All program applicants must meet minimum placement testing requirements to determine regular, provisional, or developmental admission status. Most program applicants will take the ASSET or COMPASS placement test offered by West Central. Applicants may submit recent (within the last five years) SAT, ACT, CPE, ASSET or COMPASS scores for review for placement status. Previous college or technical school course work completed at an accredited institution may be submitted for review of placement status.

Non-program seeking students are required to meet placement test score requirements per individual course registration.

Health

All applicants should be physically able to perform ordinary class and laboratory functions that are required by the program of study. Some programs require special immunizations or the submission of medical reports.

Transfer from Other Institutions

Any student wishing to transfer from another institution to West Central must have been in good standing at the former institution. Students not meeting this requirement may be considered for Provisional Admission.

In-State Residents

A student must be a resident of the state of Georgia for 12 months before initial enrollment at the college to qualify as an "in-state resident" for admission and tuition purposes. Students must be able to provide appropriate residency documentation to the college.

Out-of-State Residents

An out-of-state resident shall be enrolled on a space available basis and shall not displace any student desiring to enroll who is a resident of the State. An out-of-state resident will be charged tuition at two times the rate of in-state residents. A student initially enrolled as an out-of-state resident may complete a Change of Residency Request Form with the Office of Student Affairs 12 months after becoming a resident of the state. Official documentation of state residency will be required. In-state residency for admission and tuition purposes will begin the academic quarter following the one-year anniversary date of documented initial Georgia residency.

Residents of Cleburne and Randolph counties in Alabama will be considered "in-state residents" for admission and tuition purposes.

International Students

Persons residing in the United States on permanent residency status may qualify as an "in-state resident" or "out-of-state resident" for admission and tuition purposes as defined in the In-State Residents and Out-of-State Residents sections of this catalog. Permanent residents must submit documentation of their permanent residency status. West Central Technical College is not approved by the Office of Immigration and Naturalization Services (INS) to accept students residing in the United States while on a student visa. Any other international student, determined eligible for admission, shall be enrolled on a space available basis and shall not displace any student desiring to enroll who is a resident of the State. An international student will be charged tuition at four times the rate of in-state residents.

Admissions Status

1. Admission status to a technical college will be one of the following: Regular, Provisional, Developmental, Special or Transient.
2. Minimum admissions requirements are specified in each certificate, diploma and degree program's standards.

Regular Admission

1. Regular admission to a certificate/diploma /degree program is contingent upon meeting minimum admission requirements for the specific program and upon proper completion of application, assessment, and placement procedures.
2. Regular admission of transfer students to a certificate/diploma/degree program additionally requires that the student be in good standing at a regionally accredited diploma or degree granting institution.

Provisional Admission

1. Provisional admission to a diploma/degree program is contingent upon proper completion of application, assessment, and placement procedures. Students who do not meet minimum admission requirements may be admitted on provisional status based on an evaluation of test scores and other admissions file data. Provisional admission is not available for any certificate program.
2. Provisionally admitted students will satisfy learning support requirements and may take core courses or certain occupational courses designated in the program specific standards.
3. Provisional status students must be working toward becoming regular status. Provisional students are NOT permitted to drop all learning support courses and remain in program courses.
4. All diploma/degree program students initially admitted on a provisional basis must have satisfactorily completed the necessary prerequisite and learning support coursework in order to achieve regular admission and progress through the state standard curriculum.

Developmental Admission

1. Developmental admission is granted to students who do not meet the regular or provisional admission requirements.
2. Developmental status students are eligible to enroll in learning support classes only.

Special Student Admission

1. The special student admission category is designed as an admissions status for students who desire credit for coursework, but are not pursuing a certificate, diploma, or degree with West Central.
2. The special status student may receive credit for an unlimited number of courses; however, no more than 25 credit hours may be transferred into a specific program for award seeking purposes.
3. The special status student must meet minimum placement requirements and prerequisite course requirements for individual course registration.

Transient Student Admission

A student in good standing at another accredited institution may be permitted to enroll to complete work to be transferred back to the parent institution. A student completing coursework at West Central to be transferred to another institution is considered a transient student.

The transient student must:

1. Complete and submit application for admission with a one-time nonrefundable $25 fee.
2. Submit a transient student letter for initial admission and prior to registration for each subsequent quarter of attendance. The letter should be issued by the registrar or academic dean of the parent institution to the effect that the student is in good standing and eligible to return to that institution. The letter must state the course(s) the student may take for the specific quarter of attendance and must be submitted to the Office of the Registrar at least two weeks prior to the scheduled registration date.
3. Students receiving financial aid at their home college will also need to submit a transient letter with proof of financial aid prior to registration for each quarter of attendance. The letter must state the student's financial aid eligibility for the specific quarter of attendance and must be submitted to the Office of Registrar at least two weeks prior to the scheduled registration date.

Requirements for Transient Permission at WCTC:

1. Student must be a current student or complete a student update for current quarter.
2. Student should be classified as a Regular Status student for Admissions purposes.
3. Student must be in good academic standing.
4. Course(s) must be required for student's current program of study at the college.

Readmission

Students who withdraw in good standing from West Central and wish to re-enter must apply to the Office of Student Affairs. A Student Update Form must be submitted no less than four (4) weeks prior to registration. Students who desire reinstatement and have been dismissed for academic, attendance, or disciplinary reasons, or who voluntarily withdraw while not in good standing, must make their request for readmission in writing to the Director of Admissions.

Double Programs/Majors

The opportunity to pursue a double program/major is available on a limited basis. A student may request approval of a double program/major by submitting a Student Update Form in the Office of Student Affairs.

- Student must have regular program admission in the primary program.
- Student must be in good academic standing.
- Programs must have a common core curriculum and be closely related.
- Double programs/majors are not allowed in certificate programs or any Health Services program.

Admissions Appeal

Applicants who feel that they were unjustly denied admission to West Central Technical College may appeal to the Vice President for Student Affairs. The appeal must be made in writing within five days of the student's receipt of the admissions denial letter. The Vice President for Student Affairs will make a written report of findings within ten working days of receipt of the written appeal. Further appeal may be made to the President of the College.

Program Categories: Certificate/Diploma/Degree

Any student who has been admitted through the regular admissions procedures and is following a course of study toward a certificate, diploma, or degree in any of the programs offered by West Central is classified as a certificate, diploma, or degree credit student.

Credit for High School Coursework

A student who has successfully completed a secondary Career Pathway Program of Study (three courses within a single pathway) may be eligible for articulated postsecondary course credit. The College has articulation agreements in place with the local school systems identifying courses in the areas of business, health occupations, and marketing, as well as trade and technical and general core courses. The applicant shall be responsible for procuring the proper documentation for articulation credit review.

1. Student must meet all admissions requirements as stated by the institution.
2. Student must submit an official high school transcript identifying completion of a Career Pathway Program of Study.
3. Student must complete courses to be articulated with a minimum grade of 85%.
4. Student must submit a *Documentation of Articulated Credit* form identifying secondary course(s) completed and postsecondary course(s) articulated. The teacher's signature is required for each secondary course.
5. Student must enroll in the postsecondary institution within 18 months of high school graduation.
6. Articulated course credit will be transferred after one full quarter of successful completion of postsecondary course work at the institution or upon successful completion of a course skills/knowledge validation exam.
7. All articulated courses will be exempt from fees.

For more information about Career Pathways or course articulation agreements, please contact the Education and Career Partnership Manager at 770.824.5244.

High School Dual Enrollment

High school students who are excelling academically may enroll in identified courses or programs which normally require a high school diploma. The credits earned by completing the college course(s) must be applied to both the high school academic record/transcript and college academic record/transcript. A Dual Credit Agreement or an Accel Program Application must be completed by the student, parent, high school official, and college official. The Dual Credit Agreement or the Accel Program Application must identify the specific college courses in which the student is eligible to enroll.

Certificate & Diploma Dual Enrollment Programs

Program availability is based on individual program agreements between local high schools and West Central. Each agreement specifies the program of study and the course alignment between the college course/s and the high school course/s. The credits earned by completing the college course(s) must be applied to the high school academic record/ transcript and college academic record/transcript. Please check with an admissions counselor for program availability for specific area high schools.

Georgia high school students dually enrolled in a certificate or diploma program may receive the HOPE (Helping Outstanding Pupils Educationally) Grant if they complete the HOPE Grant application process and meet all HOPE Grant eligibility requirements. Credit hours paid by the HOPE Grant for the student will count towards the limit of postsecondary hours paid for by the HOPE Program.

Eligibility Requirements:

To be eligible for dual enrollment certificate or diploma programs, the student:

- Must be at least 16 years old.
- Must be a high school junior or senior.
- Must meet the minimum placement test scores required by the college.
- Must be in good academic standing in his or her high school program.
- Must complete the West Central Student Application process.
- Must submit a Dual Credit Agreement signed by student, parent and high school official. Must, if applying for the HOPE Grant, complete the HOPE Grant application process and meet all HOPE Grant eligibility requirements.

Degree Level Core Course Dual Enrollment (Accel Program)

The High School Accel Program allows Georgia high school students who are excelling academically to enroll in identified degree level core courses while still enrolled in high school. The high school certifying official must identify the high school course/s to be substituted by the postsecondary course/s. The college official must identify the postsecondary course/s to be completed as identified in the *Course Directory for High School Courses and College Equivalents for the ACCEL Program*. The credits earned by completing the college course(s) must be applied to both the high school academic record/transcript and college academic record/transcript.

The program is funded by the Georgia Lottery for Education, and the credit hours paid by the Accel Program for the student will count towards the limit of postsecondary hours paid for by the HOPE Program.

Eligibility Requirements:

To be eligible for the Accel program, the student:

- Must be at least 16 years old.
- Must be a high school junior or senior.
- Must meet the minimum placement test scores required by the college.
- Must be in good academic standing in his or her high school program.
- Must complete the West Central Student Application process, which includes the following:
    - The student's parent must complete Part I of the Accel Program Application.
    - The high school official must complete Part II of the Accel Program Application.
    - The College must complete Part III of the Accel Program Application.

Registration

West Central Tech registration dates are listed on the academic calendar at the front of the catalog and on the College's website at www.westcentraltech.edu/academics/calendar.html. Steps for registration are also available on the WCTC web site, and quarterly course schedules are posted as the dates and times for advisement and registration become active each quarter. Registration is conducted via the web and/or with the assistance of a student affairs staff person or academic advisor. There are several phases of registration each quarter, to serve various groups of students.

Returning Student Registration is open to currently enrolled students shortly after the mid-point of each quarter. Students who have been out only one quarter may request to register with returning students by completing a Student Update Form in the Office of Student Affairs by the third week of the quarter. Returning student registration is not available to Special Status or Transient students.

NOTE: Students may not register by phone but may schedule an appointment with program advisors by phoning or, preferably, by emailing. In determining quarterly schedules, the online version is the most accurate list of available classes; changes are updated regularly: www.westcentraltech.edu/academics/course_schedule.pdf.

Open Registration (new student registration) begins one week after returning student registration begins and allows for registration of new students who have been admitted in the first part of the quarter and those who are admitted during the time leading up to the final day of open registration and orientation, scheduled quarterly at each campus.

Late Registration is open to all students who do not take advantage of early registration or the open registration period, or who apply by the application deadline for late registration. A nonrefundable late registration fee applies. Late registration is held on each campus the business day immediately prior to the first day of each quarter.

Students may make changes to their schedules during open and late registration as well as during drop/add (first two days of the quarter). Courses dropped during this time will not be included on a student's transcript.

Drop/Add is scheduled the first two days of each academic quarter Students wishing to make changes to their schedules must do so by the second day of the quarter. Students may drop or add courses during this period. Courses dropped during Drop/Add will not appear on the student's official academic record.

Withdrawal from one or more courses before or during the Drop/Add period will not incur tuition or fee penalties or appear on a student's academic record. Students who need to withdraw from one or

more courses after the second day of the quarter must do so either by completing a Drop Form, available in the Registrar's office or by emailing registrar@westcentraltech.edu. The course(s) will be included on the student's transcript.

1. Any student dropping ALL classes for the academic quarter must complete an Official Withdrawal Form in the Office of Student Affairs.
2. A provisional student may NOT drop a required learning support course and remain registered for a non-learning support course.
3. The date the Office of Student Affairs receives the student's official Drop Form or Official Withdrawal Form will be used as the effective date of drop.

If a student withdraws from a class after the first official day of the quarter but within the first seven calendar days of the quarter, the student will receive a 75% refund of the tuition only. After seven days, no refunds will be given.

'No Shows' are reported for nonattendance in the first seven days of class. Any student who fails to show for class or log in for online classes within the first seven days of the quarter will be turned in as a 'No Show.' 'No Show' classes will not appear on a student's record, and no refund will be given. Financial aid students who have been turned in as a 'No Show' will become responsible for all charges.

Special Status and Transient Student Registration is held the same day as late registration without assessment of a late fee. Registration for students admitted in special status is available to new students who complete their admissions file by the quarterly application deadline, currently enrolled special status students, and previous special status students who request readmission by the quarterly application deadline.

Registration for transient students is available to new students who complete their admissions file by the quarterly application deadline. Registration for currently enrolled transient students is available to students who submit a transient student letter at least two weeks prior to registration each quarter. Registration for previously enrolled transient students is available to students who request readmission and submit a transient student letter by the quarterly application deadline.

Orientation

Orientation acquaints students with West Central Technical College, its policies, and its services. New students and students who are returning to West Central after being out for two or more quarters are required to complete general orientation at the time of registration.

Additional orientation information is provided by instructors in each of the College's programs of study. The catalog also details further information on the policies and services provided by the institution.

Student Identification Number

At the time of admission to the College, each student will be assigned a nine-digit identification number to be used throughout the time of enrollment. This student number will be used during course registration, for online course access, and in many other situations as students' primary means of access to their academic and financial aid records.

Personal Identification Number (PIN)

At the time of admission to the College, each student will be assigned a default six-digit Personal Identification Number (PIN). This number will be used by students to gain access to their academic and financial records in BanWeb. For security purposes, students are encouraged to change their PIN from the default in order to maintain the confidentiality of their records.

Student Email

Students will receive a West Central email account upon their initial course registration. Email is the primary vehicle used for communication of important events, announcements, deadlines, financial aid information, registration, and much more. All instructors will require students to access their email accounts for course information and updates throughout the quarter. Instructions for email usage are located on the BanWeb page of the West Central web site.

Health Services Programs (General Procedures)

Applicants to diploma and degree Health Services programs must complete a competitive selection process prior to admission to the program. Applicants may initially choose to be admitted as institutionally accepted to take core courses for their intended program, or they may choose to apply to the Health Care Assistant certificate program to take core courses required for their intended diploma or degree Health Services program.

Institutional Acceptance

Students institutionally accepted will be placed as developmental, provisional, or regular admission status, based on the intended diploma or degree Health Services program. Students may take all core courses required for their intended program. Institutionally accepted students are not enrolled in a program of study and are not eligible to receive financial aid.

Health Care Assistant Certificate

Students accepted to the Health Care Assistant certificate program will be placed as developmental, provisional, or regular admission status based on the certificate requirements and the requirements of the intended diploma or degree program. Students will take general core courses and health core courses common to both the certificate and the intended diploma or degree program. The certificate includes some of the core courses required for a student's intended diploma or degree program and also offers several health care specializations. Students enrolled in the Health Care Assistant certificate may be eligible to receive financial aid. Please review the complete program information contained in the Certificate Programs section of this catalog.

The competitive selection process for diploma and degree Health Services program is made up of three levels.

Level I: Preparatory/Core Courses
Level II: Competitive Selection
Level III: Occupational and Clinical Courses

Student Guidelines for the Competitive Selection Process

1. The student must declare his/her intended diploma or degree Health Services program on the Student Application or Student Update form prior to the selection deadline.
2. A student may not declare or be included in the selection process for more than one Health Services program at a time.

3. A Competitive Progression File Review Request will include the student in one selection process only—if not selected, a student must submit a new Competitive Progression File Review Request to be included in the next selection process.
4. Specific technical, science, and Health Services courses must be completed within seven years of the start of Level III Occupational and Clinical Courses.
5. All transcripts reflecting grades earned in required courses must be received prior to the selection deadline.
6. A student selected and enrolled in Level III courses for any Health Services program who does not successfully complete with his/her class must petition the Chair of the Health Services Division to be included in the Level II Selection for any Health Services program in the future. The Chair will then forward a recommendation to the Dean of Instruction, who will approve or deny the request.

Competitive Selection Academic Scoring Guidelines

The following are general standards for academic scoring and should be used by students as a guideline. Students with specific questions about the scoring process should contact an admissions counselor in the Office of Student Affairs.

1. A minimum grade of *C* must be earned in each required course.
2. Specific technical, science, and Health Services courses must be completed within seven years of the start date of Level III-Occupational and Clinical Courses
3. The highest grade earned in each required course will be included in the competitive selection academic score.
4. Students receiving exemption credit, advanced placement credit, Tech Prep articulated credit ,or other nontraditional credit for required courses should consult with an admissions counselor for scoring information.

Occupational and Clinical Courses

The student must have the following official documentation of file prior to clinical rotations:

- Completed Physical Examination and Health History, with a physician's statement that the student is in satisfactory health
- Approved drug screening at sites arranged by WCTC administration
- Copy of immunization records including PPD and/or chest x-ray
- Hepatitis screen results and documentation of immunity to rubella, rubella, measles, varicella and tetanus
- Influenza Vaccination
- Professional Liability Insurance (may be purchased through the college)
- CPR for Healthcare Providers Certification
- Verification of health/accident insurance
- Background check

Specific Admissions Procedures for Diploma and Associate Degree Level Health Services Programs

Each diploma and degree Health Services program has specific admissions and selection criteria. Please refer to the specific criteria listed for each program within this catalog.

WCTC Non-Discrimination Policy and Grievance Procedure

West Central Technical College is in compliance with the rules and regulations for the administration of Title VI of the Civil Rights Act of 1964; Title IX of the Educational Amendments of 1972; Public Law 83-318, as amended by Section 3 of Public Law 93-568; Title VI, Section 504 of the Rehabilitation Act of 1973; and Public Law 101-336, The Americans with Disabilities Act of 1990.

The Department of Technical and Adult Education and West Central Technical College do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of the Vietnam Era, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all educational programs and activities including admissions policies, scholarship and loan programs, athletic and other Department of Technical and Adult Education and West Central Technical College administered programs. It also encompasses the employment of personnel and contracting for goods and services. The Department of Technical and Adult Education and West Central 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.

West Central Technical College is adamantly opposed to inappropriate workplace behavior, including unlawful harassment, discrimination, and retaliation, and will take effective measures to stop such behaviors. Since the College can take action to stop such behavior only if it is aware of such activities, it is crucial that employees seek assistance. Please seek assistance if you feel that you have been personally harassed, discriminated against, or have been retaliated against.

Grievance Procedure

The following procedure is to be used in reporting and settling grievances in regard to the policy listed above.

1. Opportunities will be provided to resolve the complaint informally through meetings with proper faculty, staff, students, and appropriate administrators.
2. All grievances or complaints alleging action of a discriminatory nature shall be addressed, in writing, to the appropriate coordinator listed below.
3. Upon written notification of the complaint, the appropriate coordinator shall select (or serve as) a thorough and impartial investigator to examine the allegation including:
    - Interviewing the complainant and the alleged perpetrator separately.
    - Interviewing any witnesses named.
    - Rendering an opinion as to the merit of the complaint based upon the information gathered.
    - Recommending an appropriate response to the allegation.
4. The investigator will complete the investigation and inform the President of the College (and the appropriate coordinator if necessary) as to the results of the investigation and the recommended action within thirty (30) calendar days of submittal of the written complaint.
5. The President will have ten (10) calendar days to render a final decision and inform the alleged perpetrator of the results of the investigation and then enforce any disciplinary action to be taken (if complaint is found to be justified).
6. The appropriate coordinator will inform the complainant as to the outcome of the investigation.
7. The President's decision may be appealed in writing, respectively to the West Central Technical College Board of Directors, The Commissioner of the Georgia Department of Technical and Adult Education, and the Board of Directors of the Georgia Department of Technical and Adult Education.

Tuition and Fees

The tuition and fees listed below are assessed according to the policies established for all technical colleges governed by the State Board of Technical and Adult Education. Tuition and fees are subject to change without notice. Fees are charged to cover the cost of registration and other incidental items necessary to maintain the instructional activity. The following fees will apply:

Application Fee: Students applying for admission must pay a one-time nonrefundable application fee of $25.

Registration Fee: All students must pay a $26 registration fee each quarter.

Student Activity Fee: Students are required to pay a student activity fee of $20 each quarter. Students enrolled in an exclusively online program of study will not be required to pay an activity fee.

Tuition Fee: All students will be assessed fees at the rate of $31 per credit hour for tuition for diploma and degree programs, up to a maximum of 12 credit hours per quarter. Certificate fees may vary, depending on program.

Graduation Fee: All graduating students must pay a $20 graduation fee.

Student Insurance Fee: Students are required to pay a student insurance fee of $4 each quarter. Students enrolled in an exclusively online program of study will not be required to pay a student insurance fee. All students enrolled in a credit program are covered while on campus by the student's accident insurance.

Out-of-State Tuition Fee: Out-of-state students are charged tuition twice that charged for in-state residents. Out-of-state students pay activity and registration fees equal to that charged for in-state residents. Student residency is determined at initial enrollment. (Please refer to the Admissions section of this catalog for definitions).

Residents of Cleburne and Randolph counties in Alabama will be considered as in-state residents for fee purposes.

International Tuition Fee: International students pay tuition four times that charged for in-state residents. International students pay activity and registration fees equal to that charged for in-state residents. Student residency is determined at initial enrollment. (Please refer to the Admissions section of this catalog for definitions).

Instructional and Technology Support Fee: A fee of $35 will be charged to all students each quarter regardless of how many hours a student is enrolled. These funds will be used to increase instructional resources and technology.

Textbooks: Students will be expected to purchase necessary text books, materials for personal projects, and other items required for each course. For the convenience of the students, the college maintains a bookstore on each campus where textbooks and supplies may be purchased. Every student is required to have books, tools, uniforms, and other equipment appropriate to the program of study; in most instances these items will be usable in the student's employment following graduation. All required books and supplies may be purchased from the College bookstores or online.

Late Registration Fee: Any student who does not register for class and pay fees at the designated registration time(s) will be charged a late registration fee of $25. All fees are due when the student registers each quarter. A student is not registered until all fees are paid. A check return fee of $25 is charged for handling each check returned to the college.

Fee Chart

To determine quarterly costs, compute the number of credit hours and consult the fee chart.

NUMBER OF CREDITS	TUITION	FEES	TOTAL
1	$31.00	$85.00	$116.00
2	$62.00	$85.00	$147.00
3	$93.00	$85.00	$178.00
4	$124.00	$85.00	$209.00
5	$155.00	$85.00	$240.00
6	$186.00	$85.00	$271.00
7	$217.00	$85.00	$302.00
8	$248.00	$85.00	$333.00
9	$279.00	$85.00	$364.00
10	$310.00	$85.00	$395.00
11	$341.00	$85.00	$426.00
*12	$372.00	$85.00	$457.00
Commercial Truck Driver	$2,044.00	$199.00	$2,243.00
Emergency Medical Technician	$56.00 per credit hour + $85.00 **FEES		
Welding	$45.00 per credit hour + $85.00 **FEES		

* **full-time status = 12 credits**

**FEES:

- Activity $20.00
- Insurance $4.00
- Registration $ 26.00
- Instructional and Technology Support Fee $35.00

Georgia residents 62 years of age and older may take courses at West Central Technical College on a space available basis free of tuition fee. Such students will be responsible for activity fee, insurance fee, registration fee, books, and supplies. Seminars and special courses are excluded.

Miscellaneous Fee and Expenses

Books: Each student is required to purchase required books for courses. Costs vary, depending upon the course in which the student is enrolled.

Tools/Kits: In many training programs, students are required to purchase basic tools essential to the occupational field for which they are training.

Uniforms/Badges/Insurance/Liability Insurance: (can be purchased through the College) varies in cost according to program of study. In many programs students will be required to purchase uniforms and badges related to their programs.

Refund of Tuition and Fees

Students will receive a 100% refund of tuition and fees by submitting an official withdrawal form before the first day of class in any quarter. Seventy five percent (75%) of the tuition only will be refunded to the student who withdraws within the first seven consecutive days, including holidays, following the beginning date of the quarter. Refunds will be processed after the student has formally withdrawn from class. Refunds are made by check and mailed within two weeks of withdrawal.

Students who are eligible for Title IV funds and withdraw from the College before completing 60% of the quarter will have their award recalculated according to the Higher Education Amendments of 1988, Return of Title IV Funds Policy. Recalculations will be based on the number of days completed within the quarter.

Student Insurance

All students enrolled in credit programs and continuing education courses are covered while on campus by school accident insurance. NOTE: The insurance is only supplementary.

Financial Obligation to the College

Failure to meet financial obligations to the College may result in the student's automatic withdrawal with no credit for the quarter. Additionally, such a student may be denied enrollment in subsequent quarters. The College will withhold copies of educational records of students who have outstanding debts to the institution.

Student Financial Aid

The purpose of the Office of Financial Aid at West Central Technical College is to offer grants, scholarships, and employment to assist students with the cost of their education. All students are encouraged to apply for financial aid. The College has financial aid personnel located in Student Affairs areas on each campus. Students are encouraged to take advantage of West Central's Financial Aid web page, which hosts a collection of information and forms pertinent to financial aid

Application Process

To apply for financial aid at West Central, students may complete the Free Application for Federal Student Aid (FAFSA) at http://www.fafsa.ed.gov. Students are encouraged to complete the FAFSA six weeks prior to the quarter of intended enrollment. Benefits of FAFSA on the web are that it's free, it's fast, it's secure and it's easy.

Students applying only for Georgia's HOPE Scholarship and HOPE Grant programs may choose to complete the Georgia Student Financial Aid Application (GSFAPPS) at www.GAcollege411.org. To apply for financial aid using GSFAPPS, students must register as users of GAcollege411 before completing the application.

West Central's financial aid application priority deadline dates are available on the financial aid website. Students must reapply for financial aid each academic year. The new financial aid academic year begins with summer quarter.

A student's financial aid award package is determined annually and is based on the student's current estimated family contribution, cost of attendance, state residency, and other general financial aid eligibility requirements. Once a student's financial aid award package is complete, a financial aid award letter will be mailed to the student.

Verification

Students whose financial aid application is incomplete or selected for verification by the Department of Education and/or West Central Technical College must complete the verification process before being considered eligible to receive the Pell Grant or other Title IV funds. The Financial Aid Office will notify students of the necessary documentation to be submitted to that office.

Satisfactory Academic Progress Policy

In order to remain potentially eligible for financial aid, a student must maintain satisfactory academic progress in accordance with the current financial aid Satisfactory Academic Progress Policy. Satisfactory academic progress has two components: quality and quantity.

Qualitative: The student must have at least a 2.0 grade point average at the end of each quarter on the scheduled credit hours on which the payment of financial aid was based. The quarter GPA is calculated according to the College's grading system and grade point formula found in the Academic Information sections, Grading System and Grade Point Average (GPA), of this catalog.

Quantitative: Quantitative satisfactory academic progress is defined as the completion rate of at least 67% of the scheduled credit hours on which the payment of financial aid was based. Hours are counted as being completed in a course only when the student receives a final grade of A, B, C, D or A*, B*, C*, D*. Course hours for courses with final grades other than A, B, C, D or A*, B*, C*, D* are not counted as making ***quantitative*** satisfactory progress.

Consequences of Probation and Suspension

A student who fails to make satisfactory academic progress during any given quarter will be placed on probation but will be eligible to receive financial aid during the next quarter. Satisfactory academic progress will be monitored again at the end of that next quarter. If the student fails to meet the satisfactory standard at the end of the second quarter, the student's financial aid will be denied and eligibility must be re-established before any further aid is awarded. Students who have been declared ineligible for financial aid because of unsatisfactory academic progress must successfully complete the appropriate amount of course work at their own expense to bring them back into compliance and must maintain a GPA of 2.0 or above.

Financial Aid Appeals Process

Students may appeal the denial of financial aid or their award by following the procedures outlined below:

1. A student's appeal must be in writing and submitted to the Director of Financial Aid.
2. The appeal must specifically address the extenuating circumstance. Documentation of the extenuating circumstance must be provided along with the written statement of appeal.
3. The student will be responsible for payments of tuition and fees until the appeal decision is made.
4. The Financial Aid Office will notify the student of the outcome of the appeal.

Time Frame for Completion of Educational Program

The maximum hours for which a student may receive financial aid is 150 percent of the number of quarter hours required to earn the diploma or degree as stated in the College's catalog. For financial aid purposes, students may register for only those courses specified in their selected program of study.

General Requirements

All students who receive financial aid through West Central must initially meet and continue to meet these requirements:

1. Be U.S. citizens or eligible noncitizens.
2. Be registered with Selective Service (if required).
3. Be enrolled in West Central seeking a certificate, diploma, or degree in a program of study.
4. Not be in default or owe a refund on any Title IV aid program from any source.
5. Meet standards established by the College for maintaining satisfactory academic progress.
6. Establish eligibility under the Title IV Drug Conviction policy of the Higher Education Reconciliation Act of 2005.

Federal and State Grants

Pell Grant: This federal aid program is available to students with demonstrated financial need who have not earned a bachelor's degree and who are admitted as a regular or provisional student. The amount of aid depends upon the cost of the student's program and the result of an analysis of resources available to the student. If approved without condition, the cost of tuition and most fees can be deferred against a student's award during registration, and any remaining funds will be disbursed to the student after the 60% point of the quarter.

Returning Title IV Funds: When a PELL eligible student withdraws or does not complete enrollment for a quarter, West Central Technical College will return Title IV funds as set forth in the Higher Education Reconciliation Act of 2005.

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 Return of Title IV Funds Policy, mandated by the U.S. Department of Education, is used to determine the amount of federal student financial aid that a student has earned when he/she withdraws during a period of enrollment (quarter). For example, if the student completes 30 percent of the period of enrollment, he/she earns 30% of the assistance originally scheduled to receive. This return of funds requirement is applied to students withdrawing on or before the 60% 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 financial aid that he/she was determined not eligible to receive. (After the 60% point of the quarter, the student will have earned 100% of the Title IV funds. Contact the Office of Financial Aid for an example of this policy.)

Additionally, if an award is made to a student and for whatever reason it is determined he/she is not eligible for financial aid, the student is responsible for any overpayment or charge incurred. If a student finds the need to withdraw from a class or withdraw completely for the quarter, he/she is required to contact the Office of Student Affairs and complete a Course Withdrawal Form or an Official Withdrawal Form. The Financial Aid Office will be notified and required adjustments will be made to the student's financial aid award(s).

HOPE Programs: (Students must meet Georgia residency requirements, along with other financial aid requirements, to be eligible for any of the HOPE Programs.) Since summer quarter 2003, students may receive HOPE funds for a maximum of 190 credit hours. The HOPE Cap Combined Paid Hours Limit includes the HOPE Scholarship, HOPE Grant, and Accel programs.

HOPE Scholarship: The State of Georgia provides the HOPE Scholarship to students who graduate from a Georgia high school in the class of 1993 or later with a 3.0 GPA in an academic track and who are enrolled in an associate degree program. Students remain eligible if they maintain a cumulative GPA of 3.0. The scholarship covers tuition and most fees and allows up to $100 toward books each quarter. Eligibility is checked at the end of each 45-hour segment and each spring quarter. There will also be a three-term check point for all HOPE Scholar First Tier students who are enrolled for less than 12 hours for three consecutive quarters. Students who graduated from high school before the HOPE program began in 1993 or are not academically eligible for the HOPE Scholarship may gain eligibility for HOPE after attempting 45, 90, or 135 hours of study maintaining a 3.0 cumulative GPA. Students should contact the Financial Aid Office and complete a HOPE Evaluation form to determine if they qualify as a Nontraditional HOPE Scholar.

HOPE Grant: The State of Georgia provides the HOPE Grant to Georgia residents enrolled in a diploma or certificate program. Students remain eligible as long as they maintain satisfactory academic progress. The grant covers tuition and most fees and allows up to $100 toward books each quarter. The maximum hours that a student can receive the HOPE Grant is 95 credit hours.

HOPE GED Voucher: Legal residents of Georgia who earn a General Education Development (GED) diploma may be awarded a one-time $500 HOPE award to be used toward tuition, books, and other educational expenses. The HOPE GED voucher must have a valid expiration date at the time of enrollment.

HOPE Accel Program: Georgia high school students dually enrolled in associate degree courses may be eligible to receive Accel funding if they complete the Accel application process and meet all Accel eligibility requirements. The Accel Program covers the cost of tuition and most mandatory fees each

quarter and provides a book allowance. The book allowance may not cover 100% of the cost of books and supplies. The student is responsible for any costs not covered by the Accel Program.

Local Scholarships: West Central Technical College offers local scholarships as funds become available from local businesses, civic organizations, and individuals. For more information on the availability of these scholarships, please visit the Financial Aid website.

Federal Supplemental Educational Opportunity Grant (FSEOG): FSEOG funds are awarded by West Central Technical College to Pell Grant recipients that maintain a 2.0 GPA and display exceptional need, as determined by the student's expected family contribution.

LEAP Grant: Georgia Leveraging Educational Assistance Partnership Grant Program assists students who are residents of Georgia and who demonstrate substantial financial need. The LEAP Grant is awarded as funds become available for fall, winter and spring quarters.
NOTE: Grants usually do not require repayment when the student has attended class on a regular basis and maintained satisfactory academic progress.

Federal Work-Study Employment (FWS): The FWS Program provides part-time employment opportunities during nonschool hours for students needing financial assistance. Students who wish to earn a part of their educational expenses and who are selected for employment under this program will be paid at least the current federal minimum hourly wage. FWS applications are available on the Financial Aid website.

Payment will be by check on a monthly basis. A student's earnings may not exceed the amount of the official FWS award, which will be based upon need and the amount of funds available. Other factors to be considered in arranging a job and assigning a work schedule will be the student's class schedule, health, and academic progress. Eligibility for continued employment will be contingent upon eligible funds and job and academic performance.

Financial Aid Refund: The Business Office will pay all financial aid refund balances by check. Student financial aid refund checks will be mailed to the student. It is important that students maintain a correct mailing address with the Office of Student Affairs.

Workforce Investment Act (WIA): The Workforce Investment Act has been implemented to provide a comprehensive, customer-driven training, employment and career development system. WIA was developed to meet the needs of unemployed and underemployed individuals.

Services Provided

Core Services

- Provision of labor market information
- Information of job availability
- Training and financial aid opportunities

Intensive Services

- Individual or group counseling
- Evaluation of workforce preparedness
- Adult literacy referral
- Technical training referral

Training

- Financial assistance with technical skills training
- Supportive services

Dislocated workers may also be eligible for additional benefits through the Trade Readjustment Act/Trade Assistance Act. Please see your Workforce Investment representative or local Department of Labor office.

Eligibility Requirements for WIA

The county in which you reside or in which you were dislocated will determine the location where you may apply for Workforce Investment benefits. The regional information is as follows:

Region I—Coosa Valley RDC, 770.537.1902—includes the following counties: Bartow, Catoosa, Chattooga, Dade, Fannin, Floyd, Gilmer, Gordon, Haralson, Murray, Paulding, Pickens, Polk, Walker, and Whitfield.

Region III—Atlanta Regional Council, 404.463.3327—includes the following counties: Cherokee, Clayton, Douglas, Fayette, Gwinnett, Henry, and Rockdale. Douglas County residents may call for an appointment to meet with someone in Douglasville at 770.806.2020

Region IV—West Central Regional WIB, 770.229.9799—includes the following counties: Butts, Carroll, Coweta, Heard, Lamar, Meriwether, Pike, Spalding, Troup, and Upson. Carroll and Coweta residents may also call the DOL Career Center in Carrollton at 770.836.6668.

Veterans' Requirements and Procedures

Veterans and other eligible students receiving Veterans Administration (VA) educational entitlement are required to comply with the admissions, academic, and attendance regulations that have been established for all students at West Central Technical College. In addition, those receiving VA benefits must:

1. Seek credit for all previous training or experience that could be applicable to their chosen program of study. VA regulation 14253 requires that all previous training be evaluated for possible credit. A transcript or other documentation of training must be submitted with the individual's eligibility papers. The school will give written notice granting or denying such credit.
2. Once admitted to West Central Technical College, comply with the college's attendance regulations and report any schedule changes that could affect their status with the Veterans Administration. Such changes include:
    - Dropping or adding courses.
    - Transferring from full- to half-time status (or vice-versa).
    - Changing program of study
    - Withdrawing from school.

Any overpayment to a student receiving VA benefits that results from student failure to comply with these regulations will become the student's obligation for repayment.

For information regarding VA educational benefits, contact West Central's certifying official in the Office of Student Affairs, 770.537.5740. For more information on financial aid procedures and/or programs, contact the Office of Financial Aid in Student Affairs at 770. 537.5727.

Academic Information

Grading System

The following grade system is used to report student progress in credit courses:

Grade	(Nature of Work)	Grade Points
A	(90-100) Excellent	4
B	(80-89) Good	3
C	(70-79) Satisfactory	2
D	(60-69)	1
F	(Below 60) Failing	0
WF	Withdrew Failing	0
I	Incomplete	Not Computed
WP	Withdrew Passing	Not Computed
NG	No Grade	Not Computed
AU	Audit	Not Computed
EX	Credit by Competency Exam	Not Computed
TR	Transfer Credit	Not Computed
W	Withdrew	Not Computed
AC	Articulated Credit	Not Computed

Learning support courses are graded on an *A** through *F** scale. The following learning support grades are not computed in a student's institutional GPA but do apply toward Financial Aid Satisfactory Progress.

*A**	= 90-100	Not Computed
*B**	= 80-89	Not Computed
*C**	= 70-79	Not Computed
*D**	= 60-69	Not Computed
*F**	= 00-59	Not Computed
*WF**	= 00-59	Not Computed

Grade Point Average (GPA)

A grade point average (GPA) is calculated by (1) multiplying the credits for each course by the grade points associated with the grade earned, (2) totaling the points earned for all courses, and (3) dividing the total points by the total number of credits attempted.

***I* (Incomplete**) The grade of *I* is given to students only in extenuating circumstances. It signifies that a student has not completed all required course work by the end of the quarter. Student and instructor must request a grade of *I* before grades are posted. If the required make-up work is not completed by the end of the first three weeks of the following quarter, the *I* will automatically become an *F*. If a student received a grade of *I* in a course which is a prerequisite to other courses, the student must complete the required make-up work to determine the final grade and eligibility to enroll in other courses.

***AU* (Audit)** By registering as an auditor, a student is permitted to audit a course/program and attend classes without receiving credit. Students are not permitted to change from audit to credit after the drop/add period or from credit to audit after the drop/add period at the beginning of each quarter. Students who audit a class must pay regular fees for enrollment in any course(s).

***W* (Withdraw)** This grade signifies that a student has officially withdrawn by the midpoint of the quarter.

***WF* (Withdraw Failing)** This grade indicates that a student officially withdrew after the midpoint of the quarter. The *WF* has zero quality points and is calculated in the grade point average (GPA).

***WP* (Withdraw Passing)** The grade of *WP* is given only to students with extenuating circumstances. This grade indicates that a student was passing when he or she officially withdrew after the midpoint of the quarter.

Academic Requirements
To meet academic requirements, students may not make a grade of *D* in their program courses, including program-specific electives. (This policy excludes core courses, unless a grade of *C* or better is required as a prerequisite to other courses.) Students who make a *D* must repeat the course and obtain a final grade higher than *D*.

To fulfill the academic requirements of all health services programs, a minimum grade of "C" is required for progress from specified courses to more advanced courses. Students unable to meet the academic requirements for continuation in any health services program will not be allowed to continue until the requirements are met. Upon completion of these requirements the student will be allowed to continue when course sequence permits.

Course Numbering System
Courses numbered 0-099 are preparatory courses and do not carry credit toward graduation. Courses numbered 100 and above carry credit toward graduation. General education courses carrying a course number of 190-199 and 290-299 (e.g., ENG 191) are taught in associate degree programs.

Elective Courses
Program elective courses may be inside or outside the program of study, based on the list of approved electives provided in each program description. Diploma level general education core courses cannot be used as electives in degree programs.

College Withdrawal
A student who officially withdraws from a course(s) by the midpoint of the quarter will receive a grade of *W*. After the midpoint of the quarter, a student wishing to withdraw will receive a *WF,* which is calculated into the student's quarterly grade point average (GPA). The grade of *WP* is given only to students with extenuating circumstances.

CAAP Testing as a Degree Requirement
Students finishing Associate of Applied Science degrees must complete the three-part Collegiate Assessment of Academic Proficiency (CAAP) during either the last quarter or next to last quarter prior to graduation. The CAAP assesses mathematical reasoning, writing skills, and critical thinking skills. Those in Health Services AAS degree programs (Dental Hygiene, Medical Laboratory Technology, Registered Nursing, and Radiologic Technology) will also be required to take the Science Reasoning portion of the CAAP. The CAAP will be given multiple times during the seventh or eighth weeks of fall and spring quarter to accommodate all graduating students.

Academic Probation and Dismissal

Students who earn a GPA of less than 2.0 for a quarter are placed on academic probation. The quarter GPA is calculated according to the College's grading system and grade point formula found in sections Grading System and Grade Point Average (GPA) of this catalog.

Students who are placed on academic probation or are admitted on probation must earn a minimum of a 2.0 GPA the following quarter of attendance to remove themselves from probation. Students who fail to earn a 2.0 GPA while on probation are subject to academic dismissal.

A student who receives an academic dismissal may petition the Director of Admissions for re-admission after one full quarter. A second academic dismissal will constitute a permanent dismissal.

President's List

Credit students are eligible for recognition at either of two levels for high achieving students:

- All full-time students with a quarterly GPA of 4.0 will receive an Academic Excellence Award. All full-time students with a quarterly GPA of 3.5-3.99 will receive an Academic Achievement Award.
- All part-time students with 6-11.50 credits for a quarter and a GPA of 3.50 or higher will receive an Academic Achievement Award.

Qualifying students will receive a certificate from the President. In addition, the names of the award recipients will be published in the local newspapers each quarter.

Attendance

Students are expected and encouraged to attend each scheduled class. Absences and tardies will become a part of the student's record through the work ethics grade (detailed in the catalog section on Work Ethics Procedures). It is recognized that there may be times when a student will not be able to attend class. In such cases, it is the student's responsibility to make arrangements with the instructor concerning the completion of work missed. All make-up work will be at the discretion of the instructor, under the guidelines of the work ethics policy and procedures.

A student may be dropped from a course in which the number of his or her absences, whether excused or unexcused, exceeds 20% of the total number of course meetings in the quarter, according to the following guidelines:

Number of course meetings per week	May be dropped if absences reach
1	2
2	4
3	6
4	8

If there are extenuating circumstances, the teacher's discretion will be considered in the final decision for an exception. The grade of withdraw passing (*WP*) or withdraw failing (*WF*) will be assigned after the midpoint of the quarter. The grade of *WP* is given only to students with extenuating circumstances.

Health Services programs and all online or hybrid courses have attendance guidelines specific to those methods of instructional delivery. These guidelines will be detailed in individual course syllabi for Health Services and for online/hybrid courses.

Work Ethics Procedures

The Department of Technical and Adult Education and WCTC believe it is extremely important to identify, evaluate, and encourage good work habits as an integral part of the instructional program. Therefore, a system to evaluate "work ethics" in each course has been developed. Work ethics grades (3, 2, 1, 0) are earned in each completed credit hour course and are included on the student's permanent record and transcript.

Characteristics

The following work ethics characteristics are emphasized:

1. Attendance
2. Character
3. Teamwork
4. Appearance
5. Attitude
6. Productivity
7. Organizational Skills
8. Communication
9. Cooperation
10. Respect

Weekly emphasis is given to each of these characteristics or traits. A trait of the week will be emphasized campus wide in all credit courses. Each instructor will present a brief lesson on the trait, or activities featuring the trait may be introduced in classes or labs.

Grading

Grading is performed "by exception." Instructors record a grade for students who display either poor work ethics or exceptional work ethics behaviors. A plan of improvement is given to the student who displays a poor work ethic, and a review date is set.

There are two formal reports—the Mid-Quarter Report, a progress report given to those students who need an opportunity to improve, and the Final Report, a quarterly work ethics grade to be displayed on the student's academic record.

Evaluation Process:
3 points = Exceeds expectations
2 points = Meets expectations
1 points = Needs improvement
0 points = Unacceptable

NOTE: The work ethics credits do not count toward graduation requirements or in calculating eligibility for financial aid.

Excused Absences

No points are deducted from the attendance portion of the work ethics report if the student must be absent under any of the following conditions and follows the outlined procedures:

1. Jury duty (prior notification of instructor with written proof).
2. Death of immediate family member (mother, father, sister, brother, spouse, or child; notify instructor during the first day of absence with maximum of three days excused).
3. Court summons (prior notification of instructor with written proof).
4. Military duty (prior notification of instructor with written proof).
5. Job interview (prior approval of instructor and a job interview verification form to be signed by the employer—may be obtained from the job placement specialist).

6. Doctor's official work/school release form (completed and signed by attending physician and provided for the instructor the first day of return; a maximum of three days in a given quarter will be excused for medical reasons, but only with proper documentation).

NOTE: Students are expected to follow individual instructors' make-up policies, and the excused absences outlined above are included in the total allowable 20% of course absences. Absences above 20% of the total number of course meetings may result in the student's withdrawal from the course. (See individual course syllabi for attendance guidelines for Health Services programs and for online or hybrid courses.)

Forfeiture of Credit

By registering for a course for which the student has already received credit, a student forfeits the previous credit in that course for graduation purposes. The student's official grade in the course will be the one earned on repetition. Although both grades remain on the record and are computed in the cumulative grade point average, only the final attempt will be calculated for the purpose of graduation requirements.

Transfer Credit from Other Institutions

Students may request transfer of credit for course work completed at a nationally or regionally recognized accredited institution. To comply with state policy, West Central Technical College requires that a minimum of twenty-five percent (25%) of the course work of a particular program of study be completed at WCTC in order to grant the award. The Registrar may confer with program instructors when determining appropriateness of transfer request but is responsible for final transfer credit approval. Students who have been educated outside of the United States will need to have their transcripts translated and evaluated by professional credential evaluation services before any credit will be considered.

1. Student must request review for transfer of credit within the first quarter of attendance. Request for Transfer of Credit forms are available in the Office of Student Affairs.
2. Student must provide an official transcript from the institution with which course work was completed. Transfer credit may not be awarded if credit is showing on transcript as transfer or exemption credit.
3. Course work must be concurrent with the curriculum outline of the student's current program of study. Student may be required to furnish course catalog or course syllabus.
4. Previous course work must have been completed with a grade of *C* (2.0) or better to be considered for transfer credit.
5. Certain courses are subject to time limitations. Specific technical, science, and Health Services courses may not be considered for transfer credit after seven years.
6. Student will be notified by mail of approved transferred credits within several weeks from submission of the Request for Transfer of Credit form.

Advanced Placement

The Registrar will grant appropriate credit to students who receive scores of three or higher on an approved College Board Advanced Placement (AP) exam. Applicants must have official test scores mailed directly from the College Board to the Registrar at West Central Technical College. The Registrar will award credit for approved AP examinations listed below.

AP Exam Course
for ENG 191: English Language and Composition
for ENG 193: English Literature and Composition

Students should direct questions to the Registrar about credit for other AP courses or credit received.

College-Level Examination Placement (CLEP) Credit

West Central Technical College awards credit for a limited number of college-level examination subject exams but not for the general exams. To receive CLEP credit, the scores received must be at the 50th percentile or higher. The Registrar awards credit for the following courses:

CLEP Exam Course
for ENG 191: Freshman College Composition with Essay
for MAT 191: College Algebra
for PSY 191: General Psychology

Students wishing to earn CLEP credit for any courses not listed should contact the Registrar.

Nontraditional Course Credit

Nontraditional course credit may be awarded for military training or corporate courses where appropriate. The Registrar may confer with program instructors when determining appropriateness of course credit to be awarded but is responsible for final credit approval.

- Students must request review for transfer of credit within their first quarter of attendance. Request for Transfer of Credit forms are available in the Office of Student Affairs.
- Students must provide official documentation of previous training or course completion.
- Training/course work must be concurrent with the curriculum outline of the student's current program of study. A form DD 2586 may be required as verification of military experience and training. A course syllabus or training outline may be required for consideration of nonmilitary training.

Independent Study

With approval of the instructor and the Vice President for Academic Affairs or designee, a course may be taken as an independent study during a student's last quarter or next to last quarter. Independent study will be allowed only under extenuating circumstances in which a course is not available through a normal schedule. A student may not take through independent study a course in which he/she has previously received a grade of *D*, *F*, or *WF*. Students wishing to request independent study should contact their advisors the quarter before the course is needed in order to begin the process.

Institutional Course Exemption

For students with previously acquired knowledge and skills, course credit may be obtained by demonstrating mastery of the subject through written and/or performance tests. Exemption examinations are available for several, but not all, courses at West Central. The following courses are available for exemption:
AHS 101, AHS 104, AHS 109, BIO 193, BUS 101, BUS 102, BUS 103, BUS 105, BUS 202, CIS 103, CIS 105, CIS 106, CIS 2228, CIS 2229, ENG 111, MAT 101, MAT 103, MAT 111, SCT 100.

The following procedures for course exemption exams are to be followed:
1. Student must take the exemption exam prior to enrolling in the course.

2. Student meets with program advisor and obtains an Exemption Exam Request form. The advisor verifies the student's eligibility and signs the form, which lists all course exemption information and scheduled dates/times/locations of the exam.
3. Student presents Exemption Exam Request form to the campus cashier for fee payment. Exemption exam fee is $5.00 per credit hour. This fee is not covered by financial aid.
4. Student presents Exemption Exam Request form and photo ID to exam proctor at scheduled time of exam, on predetermined campus.
5. Student completes exemption exam. Student must receive minimum score of 80% to be awarded exemption credit.
6. The Instructional Manager on the appropriate campus submits official exam score to the Registrar for academic recording.
7. Registrar notifies the student of exemption exam results by mail and student email.

Student Right to Grade Appeal

A student who wishes to contest a final course grade or academic decision must first institute an informal appeals process through the instructor who awarded the grade or made the decision. A student must make every effort to resolve the appeal through initially contacting the instructor by phone, email, or personal visit before filing a formal appeal.

If consultation with the instructor does not resolve the appeal, the student may appeal to the Dean of Instruction by filing a written request for review. This request must be filed within four weeks from the date that the grade was originally posted. The Dean will respond to the student within two weeks of receiving the written request.

If the student is not satisfied with the Dean's decision, the student may appeal in writing to the Vice President for Academic Affairs within two weeks of receiving the Dean's decision. The Vice President will respond to the student's request within one week.

The decision of the Vice President for Academic Affairs shall be final.

Learning Support

The Learning Support Program at West Central Technical College serves students who are in need of academic assistance. It includes learning support courses designed to improve students' basic abilities in the areas of English composition, mathematics, and reading skills. These courses, designated by course numbers 097-099, carry institutional credit and may be taken prior to enrollment in credit courses or in combination with credit courses, depending on a student's admission status.

Students required to take learning support courses must take those classes each quarter until they have fulfilled the requirements. Provisional status students who withdraw from learning support courses must also withdraw from any credit courses.

In order to successfully complete learning support courses that lead to an Associate of Applied Science degree course of study, students must pass an exit exam with a qualifying score before entering credit classes that require regular status admission.

Internship

The internship program provides related work experience in a student's program of study prior to graduation. Internship is an option as an elective or as a required part of several diploma and degree programs. It is taken upon completion of prerequisites and with advisor approval. Students should see their advisors for more information.

Academic Advising System

Full-time instructors are responsible for advising students within their departments. Each student is assigned to an academic advisor at enrollment and works with that advisor throughout enrollment at West Central. Status or program changes may involve advisor reassignment.

The role of an academic advisor is to assist students in the development of meaningful educational plans that are compatible with their life goals. The ultimate responsibility for making informed decisions about life goals and educational plans rests with the individual student. However, the academic advisor can assist by working with students to identify and assess alternatives and consequences of decisions.

An academic advisor's responsibilities include helping students to design a program of study, interpret catalogs and degree requirements, and choose among academic alternatives. Advisors also monitor academic progress and recommend appropriate resources to answer questions or solve problems related to academic and career matters. They are also valuable sources of information about College policies, procedures, resources, and programs.

Academic advisors keep regularly scheduled office hours and consult with students quarterly to plan appropriate class schedules. Advisors' schedules are posted on the College web site, and students receive information regarding quarterly advisement and registration via their student email accounts.

Online Learning

Types of Courses

The following terms describe the delivery methods of online courses offered at West Central:

Online—A course in which all instruction occurs online, and testing may occur online or in a proctored environment.

Hybrid— A course in which 25%-50% of the learning activities are conducted online. Traditional class meeting times will vary within these guidelines, depending on course content and instructor discretion. Meeting times will be predetermined and specified in the quarterly class schedule.

Web-enhanced—A traditional classroom course that uses the Internet as a component of the course. That component supports classroom instruction and may require students to use the Internet in order to interact with one another and the instructor, do research, complete and/or submit assignments, or take tests.

Requirements

Online courses offer students an alternative form of course delivery that is more flexible and convenient than traditional classroom attendance. As a trade-off, however, online courses require a greater time commitment than traditionally delivered courses. Students who take online courses need strong skills in studying, time management, Internet navigation, and reading comprehension to be successful. Individual courses may require additional specific skills, such as proficiency in word processing. Following instructions, working independently, and submitting assignments by due dates are an important part of online learning. Students must have frequent access to a computer (preferably at home) and a reliable

Internet provider as some providers are not compatible with the online platform. (For more information on appropriate providers and online requirements, see our Online Learning web page.)

Students admitted in provisional status should not register for online courses; learning support and online courses are both demanding, and trying to do both decreases a student's chance of academic success. Students enrolled in learning support reading courses cannot register for online courses. Students who failed a specific course or withdrew failing from a specific course will not be allowed to take an online version of that course.

Online learning may not be the right choice for all learners, but for those who meet the requirements, it is an exciting and viable alternative to traditional classes. Students interested in pursuing online learning opportunities should visit the Online Learning page of the West Central web site or contact their advisors for more information.

Graduation Policies

West Central Technical College graduation exercises are scheduled three times a year during summer (July), fall (October), and winter (January) quarters. Students should meet with their academic advisor before completing the graduation application.

Prior to graduation, each degree, diploma, or certificate student must:

- Achieve regular program admission status for the program.
- Complete all program curriculum requirements.
- Earn a graduation grade point average of 2.0 in their program of study.
- Be in good academic standing with West Central Technical College.
- Submit a Graduation Application (for a degree, diploma, or certificate) with the advisor's signature to the Registrar's Office. Applications are due the first week of April and the first week of October.
- Settle all financial obligations with West Central Technical College, including the $20 graduation fee.
- If applying to graduate with an associate degree, take the ACT Collegiate Assessment of Academic Proficiency (CAAP) exam prior to graduation. Students should contact their advisors for more information.

A separate application and fee of $20 is required for each degree, diploma, or certificate. The graduation fee is nonrefundable and payable to the Business Office at the time a student submits an application for graduation. This fee will cover the cost of graduation activities and processing of the diploma or certificate. All questions concerning the graduation process should be directed to the Registrar's Office.

Students who graduate with a degree or diploma from a program that has embedded certificates will *NOT* be required to pay the $20 fee for the embedded certificate.

When all academic requirements and financial obligations are complete, the student will receive his/her diploma or certificate through the mail.

Student Rights

West Central Technical College promotes a climate of academic integrity, critical inquiry, strong work ethic, intellectual freedom, and freedom of individual thought and expression consistent with the rights of others. The College protects the rights of its educational mission, vision, and purpose. Students have the right to the following:

1. To be in an atmosphere that is conducive to learning and to attend WCTC educational programs, courses, offerings and activities on campus or any activity sponsored by WCTC off campus in accordance with WCTC policies and procedures.
2. To obtain the necessary knowledge, skills and abilities in order to acquire skill competencies and obtain employment by participating in programs, courses, offerings and activities in accordance with WCTC policies and procedures.
3. To develop intellectual, personal and social values.
4. To due process procedures.
5. To participate in institutional decision making in accordance with WCTC policies and procedures.
6. To participate in approved student organizations in accordance with WCTC policies and procedures.
7. To privacy as outlined in the Family Education Rights and Privacy Act (FERPA).

Student Warranty

West Central Technical College provides a guarantee of quality to all graduates of diploma or degree programs. To demonstrate confidence in and commitment to quality technical education programs which are relevant, current, and responsive to the stated expectations of Georgia's businesses and industries, the State Board of Technical and Adult Education will warrant every graduate from programs offering a diploma or associate degree according to the following stipulations:

- This warranty guarantees the graduate has demonstrated the knowledge and skills and can perform each competency as identified in the industry-validated Standard and Program Guide; any program graduate who is determined to lack such competence shall be retrained at no cost to the employer or employee for tuition or instruction fees.
- Any claim against the warranty will be based upon an agreement between the employer and the college graduate that the individual could not perform one or more of the competencies contained in the industry-validated Standard and Program Guide.
- This warranty is included as a part of the original tuition cost at all state technical colleges in Georgia and is applicable to graduates of any diploma or degree program who entered the program subsequent to the mandated standards implementation date.
- This warranty will remain in effect for two consecutive years following the date of graduation and will be honored by any state technical college which offers the same program.
- This warranty shall be issued in writing to each graduate who enters a diploma or degree program subsequent to the mandated standards implementation date beginning in the fall quarter, 1989.

Student Affairs

Personnel from the Office of Student Affairs help to provide a successful learning environment for students at West Central Technical College. They support the total educational effort through services that include testing, admissions, job placement assistance, student follow-up, and student records.

Admissions Evaluation

Interest and abilities testing is available to help an applicant decide which program to enter. During program placement sessions with potential students, admission counselors may use the information gathered from testing to help students explore pre-enrollment career options or develop educational plans.

Library Services

The library staff works closely with the faculty, administration, and students to acquire print and non-print media appropriate to the needs and level of each student. Professional reference collections are also available for student use.

Computers are available in the library for faculty, staff, and student use. The Murphy, Carroll and Douglas libraries are open Monday-Thursday, 8:00 a.m.-9:00 p.m., and Friday 8:00 a.m.-5:00 p.m. Please check with library staff for current Saturday hours.

Student Records

Procedures relating to the establishment of student records are in accordance with the provision of the Family Educational Rights and Privacy Act (FERPA) of 1974 (Buckley Amendment), as amended, with the policies of West Central Technical College, and with the regulations of the Department of Health, Education, and Welfare.

Each student at West Central Technical College has the right and may request to inspect his or her general education records within a reasonable period of time. This right of inspection includes academic records maintained by the Office of Student Affairs. All College records are confidential and are not available without the student's written consent. College officials have access to student records when required in the performance of their assigned duties. Directory information (name, address, telephone number, date and place of birth, major field of study, participation in degrees and awards received) will normally be released without student notification or consent unless a student has requested that such information not be released. Students desiring access to their records should contact the Registrar's Office. Students may view their student records on the BanWeb page of the West Central web site.

Career Services

The mission of the West Central Technical College Career Services Department is to provide support to students, graduates, and employers while creating a viable link between students and potential career sources.

Career Services is designed to assist students in preparing for the job search process and locating major-related employment upon graduation. Career Services maintains contact with the instructional staff and acts as a conduit for referrals. Students may access services such as individual career counseling, career workshops, assessments, and online career resources at any time during their enrollment or after graduating.

Periodic follow-up surveys are conducted to obtain data from former students and employers. This data assists the College as it seeks to meet its training objectives. When contacted, former students and employers are urged to promptly return the completed materials.

Get Connected … with eRecruiting

- Log on to http://wctc.erecruiting.com
- View "Student" box on left of screen.
- Click "Create Account" and follow instructions for completing your personal profile, uploading your resume and conducting a job search.
- Click "submit" after carefully proofreading your profile.
- When applying for any position on eRecruiting, follow the instructions in the description. You may only apply online if requested by the employer.
- Logon frequently for daily position updates and other important announcements.
- By setting up an eRecruiting account, you will receive email notices for career fairs, on-campus recruiters and other important career-related information.

Questions: Contact Career Services at 770.824.5241 or 770.824.5242.

One-Stop Career Resource Center

The West Central Technical College One-Stop Career Resource Center, located on the Murphy Campus, assists the economic well being of our community workforce by serving as a focal point for a wide range of services for employers, WCTC students, graduates, and other job seekers through an integrated system of employment, training, and educational resources. The Career Resource Center provides a means of connecting job seekers and employers.

WCTC, the core funding provider, has implemented continual funding efforts with collaborative state agency resource providers such as the Georgia Department of Labor, Vocational Rehabilitation, Right from the Start Medicaid, Family Connections, and state service providers with the Department of Technical and Adult Education Special Services—Georgia Fatherhood Program and WIA Program services for the economically disadvantaged and dislocated workers.

The Career Resource Center is a way of reinventing government services so that employers and job seekers can receive better, more comprehensive service in one place, without having to navigate through a bureaucratic maze of programs and services.

Career development resources include access to copy machines, fax machines, computer/LaserJet printer connectivity, internet access, the Workforce Library Center, the WinWay resume program, and Mavis Beacon.

Georgia Fatherhood Program

The Georgia Fatherhood Program was established in 1997 with locations throughout the state of Georgia. The Georgia Fatherhood Program is designed to assist noncustodial parents to become more active, both emotionally and financially, in the lives of their children and to place the parents in jobs or job training leading to permanent employment.

How can Georgia Fatherhood Benefit Students?
The program provides:

- Academic and vocational counseling
- Career guidance
- Support groups for developing self-esteem
- Financial aid assistance
- Life skills and job skills training
- Interpersonal communication skills
- Skills training needs to find employment and success on the job

Who is Eligible for Georgia Fatherhood?
Noncustodial parents:

- Who have been court ordered to pay child support, are unemployed or underemployed.
- Who desire assistance in acquiring the skills needed to get a job and succeed in the work environment.
- Primarily those who are residents of Carroll, Coweta, Douglas or Haralson County but may also include neighboring counties.

Does Georgia Fatherhood Cost Anything?
The Georgia Fatherhood Program is FREE to qualified applicants.

When is the Georgia Fatherhood Program Offered?
Program orientations are offered monthly. For more information, please contact the Fatherhood Program Coordinator at 770.838.2526, or your local Child Support Enforcement Agent.

Disability Services

West Central Technical College provides equal educational opportunities to qualified students with disabilities. Assistance is available for students with a temporary or permanent physical or psychological disability or with a learning disorder, including attention deficit disorder, acquired brain injury and specific learning disability. To receive the services, a student must provide recent documentation (evaluations that clearly indicate that a physical, psychological or learning disorder is present).

For all types of disabilities, certain accommodations are provided in order to offset as much as possible the effect the disability may have on learning, class performance and testing. Based on the student's documentation and a personal interview, these accommodations are determined and developed on a case-by-case basis by the Coordinator for Special Needs. Accommodations may include but are not limited to the following:

- An individualized Classroom Accommodation Form for instructors, if desired
- Extended time for class/work projects/tests (extended time is not allowed for course criteria that require time as part of the competency; for example, typing speed of 25 words per minute)
- Preferred seating in classrooms
- Permission to use audio tapes for classroom lectures
- Sign language interpreters
- Magnification software
- Tutoring

To request reasonable accommodations based on valid documentation or to schedule an appointment to receive additional information, students may contact the Coordinator for Special Needs in the Office of Student Affairs at 770.537.5727, Murphy Campus.

Student Organizations and Activities

Many student organizations are available at West Central Technical College, and other organizations are currently being researched in order to offer a broader range of activities in the near future. Joining one of the following organizations can enrich a student's academic experience and facilitate meeting other students. For more information, students may contact the Student Activities Coordinator at 770.537.5722.

Student Activities Council: The Student Activities Council is free to join and open to all students in any program. This organization serves as the Student Government at West Central Technical College. Student Activities participates in fund delegation and discussing important issues on campus. The Student Activities Council also sponsors and volunteers for charity events on and off campus, lecture and other educational opportunities on campus, small social gatherings for students to get to know one another, and large school wide events that are both fun and educational. Monthly meetings are rotated at the Douglas, Carroll, and Murphy Campuses.

Delta Epsilon Chi (DEX): Delta Epsilon Chi is the postsecondary division of DECA, the Distributive Education Clubs of America. DEX is a student-centered organization whose program of leadership and personal development is designed specifically for students enrolled in the Marketing Management or Culinary programs.

Lambda Alpha Epsilon: Lambda Alpha Epsilon is an international fraternity for students enrolled in the Criminal Justice program. This program aids students in learning more than in-class knowledge of the criminal justice system while they create community service projects that better the community.

Phi Beta Lambda: Business Office Technology, Accounting, and Computer Information Systems students are invited to join Phi Beta Lambda, an educational association that provides preparation for careers in business. The mission of Phi Beta Lambda is to bring business and education together in a positive working relationship through innovative programs.

Phi Theta Kappa (PTK): Phi Theta Kappa is a highly recognized international honor society for students who achieve superior academic success at a two-year college or institution. Chapter members serve as leaders for other students and for people in the community. Membership into the Beta Theta Phi Chapter offers intellectual enrichment and personal development as well as academic scholarships.

Student Nursing Association: The Student Nursing Association at West Central Technical College is part of the Georgia Student Association of Nurses. This program is for students majoring in Registered Nursing and is the way to maximize a student's experience in the nursing program. This program provides networking opportunities, Inclex review courses, aid with books, discounts, and educational conferences in- and out-of-state.

Student American Dental Hygienists' Association (SADHA): SADHA is a student organization for students enrolled in the Dental Hygiene program at West Central Technical College. Much like the Student Nursing Association, this program aids students in attending annual conferences for the Dental Hygienists Association, discounts, books, and recreational activities.

Housing

West Central Technical College does not provide housing for students attending the school; however, students desiring housing may obtain information through local newspaper advertisements and real estate agencies.

Voter Registration

West Central encourages all students to become registered voters. To register to vote you must:

- Be a citizen of the United States.
- Be a legal resident of Georgia.
- Be at least 17 years of age (must be 18 years of age to vote).
- Not be serving a sentence for a conviction of felony involving moral turpitude.
- Not have been found mentally incompetent by a judge.

Economic Development/Continuing Education

Economic Development Division

The Economic Development Division offers two distinct programs: Short-term training programs for business, industry, and the general public and Quick Start training programs for new and expanding industries. Both short-term training and Quick Start training may utilize on-campus facilities at any of the four different College campus locations or be taught on-site at the business or plant site.

West Central Technical College follows the International Association for Continuing Education and Training (IACET) guidelines for awarding Continuing Educations Units (CEU). One CEU equals ten contact hours of participation in organized continuing education/training experience under responsible, qualified direction and instruction. CEUs are awarded for Continuing Education and Corporate Training noncredit courses and seminars.

Business and industry representatives are encouraged to contact the Division of Economic Development for a complete explanation of the services provided and training programs available. For more information, call 770.537.6055.

Quick Start Programs

West Central Technical College, in conjunction with the Georgia Quick Start program, offers many customized training services for new or expanding manufacturing, distribution, or service industries. The purpose of Quick Start is to allow the industry to have a trained work force the very first day of the new or expanded operation. Our training specialists provide qualified industries with a total training package that is designed to make the industry self-sufficient for its future training needs. When possible, company employees are utilized as key persons in the training process.

Available programs may include Core Skills training, Technical/Job Specific training, Workforce Development training, Leadership training, Employee Involvement training, Productivity Enhancement training, Manufacturing Technology training, and training material development. Since Quick Start's beginning in 1967, through nearly 5,000 training projects, more than half a million Georgians have benefited from Quick Start's services. For additional information about Georgia Quick Start, please contact the Economic Development Office at 770.537.6055.

Corporate Training

The mission of Corporate Training is to prepare companies for success through well-trained employees. By providing this customized training service to members of the business and industry community, the economic well being of this region will be assured and the quality of life will be enhanced.

Customized training means that West Central Technical College's Corporate Training Department delivers training when, where, and how a company wants it. The training is tailored to the specific needs of a company's employees. By meeting with the company and touring its facility, we can formulate the type of training the company needs and the best method for delivering that training.

Through the utilization of professional trainers, we can deliver quality training at a reasonable cost that will result in value-added employees for the business. We can also determine the best location for the training, whether that is on-site at the company or at one of our campuses. A simple phone call will schedule a class for location and time convenient for the company or initiate course development for a specialized need. For more information about Customized Training Programs, call 770.537.5750.

Continuing Education

The Continuing Education Department at West Central Technical College offers short-term personal and professional development courses to the general public in a wide variety of subject areas. These are short training opportunities that focus on skill development that will enhance participants' personal lives, help them train for better jobs, or enable them to perform better at their current jobs. While these courses do not lead to a college diploma or degree, they do provide participants with new skills and training that are valuable in the world.

Programs may include computer basics and software education, computer and information technology (IT) certificate preparation, medical occupations training, personal development classes, occupational education and development, and a wide variety of online training opportunities. Selected classes are offered at each of the four College campus locations. Fees vary depending on the courses.

No entrance test is required for noncredit continuing education classes. Students should register for courses and pay the appropriate fee in advance of the class date. This can be done in person at one of the College locations, by phone, or by mail. For more information, call 770.537.7942.

Adult Education

Adult General Education/GED Preparation Classes

The Adult Education Program at West Central Technical College is specifically designed for adults who need assistance with academic skills. Our programs offer flexible schedules that can meet the needs of any adult over 16 years of age who is eligible to participate.

The Adult Education Department is located at the Carroll Campus of West Central Technical College. The Department provides free day and evening classes in Carroll, Coweta, Douglas, and Haralson Counties to students wishing to improve basic skills, preparing for the GED Tests, or developing English skills. Students requiring Learning Support 095 and 096 classwork in reading, writing, or math may complete their requirements through Adult Education.

To begin classes, call the Adult Education Department at 770.838.3192 to learn more about new student orientation classes and assessment or access our website.

The Adult Education Program offers high quality educational assistance, providing the following:
Basic Skills

- Improve reading, writing, and math skills
- Develop new interests
- Gain increased self-confidence
- Learn to help children with homework
- Improve workplace skills

GED (General Educational Development)

- Prepare for passing GED Tests
- Prepare for a better job
- Use computer lab for class work
- Study for college entrance exam
- Earn a $500 HOPE voucher with GED
- Improve reading and math skills
- Beginning - Learn to speak English
- Intermediate - Improve speaking, writing and reading skills
- Advanced - Pronunciation and usage

General Educational Development (GED) Testing

West Central Technical College has been designated as an official test center for administering the Tests of General Educational Development (GED). Those making satisfactory scores on this test will receive a GED Diploma from the Georgia Department of Technical and Adult Education. This diploma is widely accepted by government, business, industry, and other educational institutions. GED testing is available in Carroll, Coweta, and Douglas counties. For more information on GED testing and registration, call 770.838.2535.

Associate Degree Programs

West Central offers two-year associate degree programs in applied science (AAS). These programs have been authorized by the State Board of Technical and Adult Education and are accredited by the Commission on Colleges (COC). Students finishing Associate of Applied Science degrees must complete the three-part Collegiate Assessment of Academic Proficiency (CAAP) during the last quarter or the next to last quarter of their enrollment at West Central prior to graduation. The CAAP tests mathematical reasoning, writing skills, and critical thinking skills. Those in Health Services AAT degree programs (Dental Hygiene, Medical Laboratory Technology, Associate Degree Nursing, and Radiologic Technology) will also be required to take the Science Reasoning portion of the CAAP. The CAAP will be given multiple times during the seventh or eight weeks of fall and spring quarter to accommodate all graduating students. Students should see their academic advisors for further information.

Associate Degree Program Listing

Accounting

Administrative Office Technology

Applied Manufacturing Technology

Clinical Laboratory Technology

Computer Information Systems
- *Computer Support Specialist*
- *Networking Specialist*

Criminal Justice

Dental Hygiene

Early Childhood Care and Education

Electronics Technology
- *General*
- *Industrial*
- *Computer*
- *Telecommunications*

Marketing Management

Radiologic Technology

Registered Nursing

Technical Studies

Accounting

The Accounting associate degree program is a sequence of courses that prepare students for careers in the accounting profession. Learning opportunities develop academic, technical professional knowledge and skills required for job acquisition, retention, and advancement. Areas covered in this program include maintaining a set of books for business entities, account classifications, subsidiary record accounting, corporate accounting, cost accounting, payroll, computerized accounting, database and spreadsheet fundamentals, tax preparation, and word processing. The program emphasizes a combination of accounting theory and practical application necessary for successful employment using both manual and computerized accounting systems. Program graduates receive an Accounting Associate of Applied Science Degree, which qualifies them as accounting technicians.

NOTE: The three keys for successful completion of the Accounting program are (1) Attendance, (2) Dedication, and (3) Self-Confidence. The program is not difficult, provided students meet these objectives. Because the time spent in class is longer than in some other courses, attendance is important. A student must also be dedicated to doing the homework, which can be time consuming but usually better provides for long term retention of the subject matter. Finally, students need to have confidence in themselves to succeed. A determination to do the work and the confidence that they can do it will be the driving force to understanding the material.

Career Opportunities

Graduates may find employment as accounting clerks, bookkeepers, junior accountants, payroll clerks, tax preparers or cost accountants. The Accounting field continues to provide endless opportunities for professional employment and growth. Strong accounting skills = increased employment marketability = higher job demand and stability = higher compensation.

Credit Required for Graduation: Minimum of 102 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3

(continued)

	Program Course		**Credits**
	Occupational Courses		
_____	ACC 101	Principles of Accounting I	6
_____	ACC 102	Principles of Accounting II	6
_____	ACC 103	Principles of Accounting III	6
_____	ACC 104	Computerized Accounting	3
_____	ACC 106	Accounting Spreadsheet Fundamentals	5
_____	ACC 120	Principles of Auditing	5
_____	ACC 150	Cost Accounting	6
_____	ACC 151	Individual Tax Accounting	4
_____	ACC 152	Payroll Accounting	4
_____	ACC 164	Bookkeeper Certification Review	4
_____	BUS 101	Beginning Document Processing	5
_____	BUS 108	Word Processing	7
	Occupational Elective Courses (5 credits from the list below)		
_____	ACC 155	Legal Environment of Business	5
_____	ACC 156	Business Tax Accounting	4
_____	BUS 105	Database Fundamentals	3
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 110	Entrepreneurship	8
	General Elective Courses (5 credits from outside area of specialization)		
_____	Electives		5

Administrative Office Technology

The Administrative Office Technology program is designed to prepare students for employment in a variety of positions in today's administrative and business fields. The Administrative Office Technology program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention and advancement. The program emphasizes the use of the keyboard and applications software. Students are also introduced to accounting database and spreadsheet fundamentals. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative office technology. Graduates of the program receive an Associate of Applied Science degree in Administrative Office Technology.

NOTE: Many AOT students have found that by selecting electives carefully, they were able to obtain several technical certificates. Students should speak with their academic advisors regarding possibilities in relation to their specific needs.

Career Opportunities

Graduates may find employment opportunities as administrative assistants or office managers in the following workplaces: public relations offices, banks, schools, law offices, medical offices, advertising agencies, manufacturers, wholesalers, retailers, construction companies, book publishers, record companies, government agencies, insurance companies, real estate companies, investment firms, and shopping centers.

Credit Required for Graduation: Minimum of 100 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introduction to Humanities	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SPC 191	Fundamentals of Speech	5
	Occupational courses		
_____	ACC 101	Principles of Accounting	6
_____	ACC 102	Principles of Accounting II	6
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5

(*continued*)

_____	BUS 103	Advanced Document Processing	5
_____	BUS 106	Office Procedures	5
_____	BUS 107	Machine Transcription	3
_____	BUS 108	Word Processing	7
_____	BUS 105	Database Fundamentals	3
_____	BUS 201	Advanced Word Processing	3
_____	BUS 202	Spreadsheet Fundamentals	3
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5

Occupational Elective Courses (6 credits from the list below)

_____	ACC 103	Principles of Accounting III	6
_____	BUS 161	Desktop Publishing I	5
_____	BUS 230	PowerPoint	5
_____	BUS 235	Advanced Access	5
_____	BUS 240	Advanced Excel	5

Applied Manufacturing Technology

The Applied Manufacturing Technology program is a two-year associate degree level program developed to offer business and industry employees an educational opportunity that will recognize successful work experience and provide further technical and academic course work. The proposed degree program is to be submitted to the Dean of Instruction for final approval and signatures required. Day and evening classes are available.

This program is customized to individual students and industries to ensure appropriate training. Customization of the curriculum is accomplished by offering different fundamental technical courses, based on individual needs. A core of academic courses provides students with English, mathematics, and social science skills.

This program consists of four parts:

1. A core of general education courses (minimum of 25 quarter credit hours)
2. Selected technical courses
3. Academic credit for related work experience
4. Student electives

The program is intended to produce degree graduates who possess competencies as required by the agreement between a participating company and West Central Technical College. Graduates will receive an Associate in Applied Science degree in Applied Manufacturing Technology.

Career Opportunities

The Applied Manufacturing Technology degree program is intended to produce graduates who are prepared for upward mobility to cross-train in various manufacturing fields. A major component of the program is the awarding of academic credit for successful related work experiences.

Credit Required for Graduation: Minimum of 99 credit hours (actual courses will vary based on the customization of the program.)

	Program Course		**Credits**
	General Core Courses		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introduction to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
	-or-		
_____	ECO 191	Principles of Economics	(5)
	-or-		
_____	SOC 191	Sociology	(5)

NOTE: Students are encouraged to complete the core courses first—before the bulk of their program courses—instead of waiting until closer to program completion.

Work Based Courses/Learning Activities
Work-based learning will total a minimum of 20 credit hours (600 contact hours). Three contact hours of occupational-based instruction (OBI) per week for the duration of a quarter equals one quarter hour. Occupational-based instruction is defined as instruction that emphasizes supervised-with-experience activities requiring the application of occupational competencies.

Application of Work Based Learning Credits toward AMT Degree Program

- O.B.I. credit through Work Based Learning (WBL) is awarded only within the AMT program
- Maximum number of WBL credits that may be counted toward a degree is 20
- WBL credit may not:
    - Count toward residency requirement
    - Meet general education requirements

Portfolio Preparation and Submission
The means to have work or training experiences evaluated for possible college credit awards includes submitting a portfolio. The portfolio contains a student's written self-assessment of what has been learned through his/her experiences. Proof of these experiences in the form of documentation must accompany each self-assessment.

Completed portfolios are sent to the Dean of Instruction, Work Based Learning, West Central Technical College, 176 Murphy Campus Blvd., Waco, GA 30182. After the portfolio has been reviewed, credits are applied to a student's transcript by means of courses AMF 301, AMF 302, AMF 303, and AMF 304; each course provides 5 credit hours.

Clinical Laboratory Technology

The Clinical Laboratory Technology associate degree program is a sequence of courses that prepares students for technician positions in medical laboratories 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 in Clinical Laboratory Technology, have the qualifications of a medical laboratory technician, and are eligible for certification.

Career Opportunities

Graduates may find employment in hospital laboratories, reference laboratories, government and private research laboratories, physicians' offices and clinics, crime labs, home health care agencies, safety and health research laboratories, and as sales representatives.

Competitive Selection Process

Level I: Clinical Laboratory Technology Preparatory/Core Courses

The annual Level I deadline is July 1.

The following requirements must be completed by the July 1 deadline to be eligible for the Clinical Laboratory Technology program selection. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of C: BIO 193, BIO 194, CHM 191, ENG 191, and MAT 190 or 191.
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at 770.537.7942. There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.
- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Services up on completion of the required courses and attach a copy of his or her CPR certification card and a copy of the PSB Health Occupations Aptitude Exam score report.

Level II: Clinical Laboratory Technology Competitive Selection

The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 75% of the overall score.
- The score on the Psychological Services Bureau Health Occupations Aptitude Exam will comprise 25% of the overall score.
- Students with the highest overall scores will be selected for program admission.

Level III: Clinical Laboratory Technology Occupational and Clinical Courses
Students selected for admission to the Clinical Laboratory Technology program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each fall quarter.

Credit Required for Graduation: Minimum of 120 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	AHS 104	Introduction to Health Care	3
_____	BIO 193	Anatomy and Physiology I	5
_____	BIO 194	Anatomy and Physiology II	5
_____	CHM 191	Chemistry I	5
_____	CHM 192	Chemistry II	5
_____	CLT 101	Introductions to Clinical Laboratory Technology	3
_____	CLT 103	Urinalysis/Body Fluids	3
_____	CLT 104	Hematology/Coagulation	8
_____	CLT 105	Serology/Immunology	3
_____	CLT 106	Immunohematology	7
_____	CLT 107	Clinical Chemistry	7
_____	CLT 108	Microbiology	8
_____	CLT 109	Clinical Phlebotomy, Urinalysis, Serology Practicum	4
_____	CLT 110	Clinical Immunohematology Practicum	6
_____	CLT 111	Clinical Hematology/Coagulation Practicum	6

(*continued*)

_____	CLT 112	Clinical Microbiology Practicum	6
_____	CLT 113	Clinical Chemistry Practicum	6
_____	Elective	(must be approved by advisor)	2

Computer Information Systems: Computer Support Specialist

The Computer Information Systems—Computer Support Specialist—associate degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Program 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 receive an Associate of Applied Science degree in Computer Information Systems, Computer Support Specialist, and are qualified for employment as computer support specialists.

NOTE: Program courses in Computer Information Systems require strong aptitudes for math, problem solving, critical thinking, listening, teamwork, and written direction.

Career Opportunities
Computer Support Specialist graduates may find employment in end-user support, systems integration, PC repair/installation, LAN hardware support, commercial software support, and computer hardware/software sales.

Credit Required for Graduation: Minimum of 110 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CIS 103	Operating Systems Concepts	6
_____	CIS 105	Program Design and Development	5
_____	CIS 106	Computer Concepts	5
_____	CIS 122	Microcomputer Installation and Maintenance	7
_____	CIS 127	Comprehensive Word Proc. and Presentation Graphics	6

(*continued*)

_____	CIS 1140	Networking Fundamentals	6
_____	CIS 2228	Comprehensive Spreadsheet Techniques	6
_____	CIS 2229	Comprehensive Database Techniques	6

-and-

(Completion of one of the following language courses is required.)

_____	CIS 157	Intro. to Windows Progrmg. using Microsoft Visual Basic	7

-or-

_____	CIS 252	Introduction to Java Programming	(7)

(Students must take an additional 23 credit hours from occupationally appropriate courses, pending advisor approval, in order to fulfill the minimum requirements for the Microcomputer Specialist degree.)

Occupational Elective Courses (23 credits from the list below)

_____	ACC xxx	Accounting course	x
_____	BUS xxx	Business course	x
_____	CIS 260	Introduction to Fourth Generation Languages	7
_____	CIS 2211	Web Site Design Tools	6
_____	CIS xxx	Any CIS course not already required in current diploma/degree	x
_____	MKT xxx	Marketing Management course	x

Computer Information Systems: Networking Specialist

The Computer Information Systems—Networking Specialist—associate degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Program 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 receive an Associate of Applied Science degree in Computer Information Systems, Networking Specialist, and are qualified for employment as networking specialists.

NOTE: Program courses in Computer Information Systems require strong aptitudes for math, problem solving, critical thinking, listening, teamwork, and written direction.

Career Opportunities

Networking specialist graduates may find employment in network installation and maintenance, networking administration, network operating systems support, and hardware repair/maintenance.

Credit Required for Graduation: Minimum of 102 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CIS 103	Operating Systems Concepts	6
_____	CIS 105	Program Design and Development	5
_____	CIS 106	Computer Concepts	5
_____	CIS 1140	Networking Fundamentals	6

(*continued*)

_____	CIS 122	Microcomputer Installation and Maintenance	7
	-and-		
	(*Completion of one of the following language courses is required.*)		
_____	CIS 157	Introduction to Visual BASIC Programming	7
	-or-		
_____	CIS 252	Introduction to Java Programming	(7)

Networking Specialty Courses (*Prepares student for Microsoft Windows Certification*)

_____	CIS 2149	Implementing Microsoft Windows Professional	6
_____	CIS 2150	Implementing Microsoft Windows Server	6
_____	CIS 2153	Implementing MS Win Networking Infrastructure	6
_____	CIS 2154	Implementing MS Win Network Directory Services	6

(Students must take an additional 9 credit hours from occupationally appropriate courses, pending advisor approval, in order to fulfill the minimum requirements for the Networking Specialist degree.)

Occupational Elective Courses (9 credits from the list below)

_____	CIS 2211	Web Site Design Tools	6
_____	CIS 260	Introduction to Fourth Generation Languages	7
_____	CIS xxx	Any CIS course not already req. in current diploma/degree	x

Criminal Justice

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive an Associate of Applied Science degree in Criminal Justice Technology. 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.

NOTE: Prospective students need to know that they will be required to meet all applicable employment requirements, including satisfactory background and criminal checks, in order to quality for some internships and to gain employment in most law enforcement settings. A felony and/or aggravated misdemeanor conviction may bar students from completing the program.

Career Opportunities

Occupations include correctional officers, private detectives and investigators, security guards, and police and sheriff's patrol officers.

Credit Required for Graduation: Minimum of 98 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CRJ 101	Introductions to Criminal Justice Technology	5
_____	CRJ 103	Corrections	5
_____	CRJ 104	Principles of Law Enforcement	5
_____	CRJ 105	Criminal Procedure	5

_____	CRJ 168	Criminal Law	5
	(continued)		
_____	CRJ 202	Constitutional Law	5
_____	CRJ 207	Juvenile Justice	5
_____	CRJ 209	Criminal Justice Tech. Practicum/Internship	5
_____	CRJ 212	Ethics in Criminal Justice	5
	Occupational Elective Courses (20 credits from the list below)		
_____	BUS 105	Database Fundamentals	3
_____	CIS 106	Computer Concepts	5
_____	CRJ 162	Methods of Criminal Investigation	5
_____	ECE 202	Social Issues & Family Involvement	5
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5
_____	SOC 191	Introduction to Sociology	5

Dental Hygiene

The Dental Hygiene program is a sequence of courses that 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. Program graduates receive an Associate of Applied Science degree in Dental Hygiene.

West Central's Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association, 211 East Chicago Ave., Chicago, IL 60611-2678, 312.440.7494, www.ada.org. This enables graduates to take any Regional or State Board in the Nation.

NOTE: Only one class is accepted into the Dental Hygiene program each year, beginning summer quarter. The program is offered during the day at West Central's Douglas Campus.

The dental hygienist is a licensed health care professional that, as co-therapist with the dentist and dental assistant, provides educational and therapeutic services for the control and prevention of oral diseases. Clinical job functions vary according to State law. Graduates of the dental hygiene program must pass both a National and Regional Board examination to be licensed to practice in the State of Georgia. Regional and/or State exams are also offered in other parts of the country and are taken in the region of the country where the dental hygienist decides to practice.

Career Opportunities

Most dental hygienists work as part of a dental team in private dental practices. Other employment opportunities exist in Health Management Organizations, hospitals, military bases, and community clinics. Further career choices include working for dental supply companies, dental product or pharmaceutical companies, various government agencies or insurance companies. Many dental hygienists continue their education and complete advanced degrees that will allow them to teach dental hygiene or dental assisting, or become dental practice consultants, researchers, editors, dentists or professional writers.

Competitive Selection Process

Due to the nature of dental hygiene, the admissions requirements and transfer of credit policy for the program require testing a student's level of knowledge when a transfer of any dental hygiene course is considered. According to West Central Technical College's policy, if a DHY course request for transfer credit is received in Student Services for a course completed with a *C* or above from another accredited college, a student must take an equivalency examination and in some situations, such as Dental Materials and Radiology, a laboratory competency examination. The didactic and laboratory competency grade must be an 80 or above to consider the transfer of credit. The time limitations for considering these credits are the same as for science courses; the course must have been within the previous seven years. Clinical and preclinical courses will not be considered for transfer due to the uniqueness of each dental hygiene program.

Once in the dental hygiene program, a grade of *C* or above is required to continue. The courses must be taken in sequence. This grading system, and the sequencing for the Georgia DTAE Dental Hygiene programs, recommends a minimum of a *C* for progress from specified courses to more advanced courses.

Level I: Dental Hygiene Preparatory/Core Courses
The annual Level I deadline is April 1.

To be eligible for the Dental Hygiene program selection, the student must complete the following requirements by the April 1 deadline. The student:

- Must complete the West Central student application process and achieve regular status program.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of C: AHS 104, BIO 193, BIO 194, ENG 191, MAT 190 or MAT 191, and SCT 100.
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at 770.537.7942. There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.
- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Services upon completion of the required courses and attach a copy of their CPR certification card and a copy of the PSB Allied Health Aptitude Test score report.

Level II: Dental Hygiene Competitive Selection
The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 50% of the overall score.
- The score on the Psychological Services Bureau Health Occupations Aptitude Exam will comprise 25% of the overall score.
- Students with the top academic scores will then be selected for a committee interview.
- The interview will comprise an additional 25% of the overall score.

Students with the highest overall scores will be selected for program admission.

Level III: Dental Hygiene Occupational and Clinical Courses
Students selected for admission to the Dental Hygiene program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each summer quarter.

Credit Required for Graduation: Minimum of 123 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)

(continued)

_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SOC 191	Introduction to Sociology	5

Occupational Courses

_____	AHS 104	Introduction to Health Care	3
_____	BIO 193	Anatomy and Physiology I	5
_____	BIO 194	Anatomy and Physiology II	5
_____	BIO 197	Introductory Microbiology	5
_____	CHM 191	Chemistry I	5
_____	DHY 100	Tooth Anatomy and Root Morphology	3
_____	DHY 101	Oral Embryology and Histology	2
_____	DHY 102	Head and Neck Anatomy	3
_____	DHY 103	Dental Materials	3
_____	DHY 104	Preclinical Dental Hygiene Lecture	2
_____	DHY 105	Preclinical Dental Hygiene Lab	2
_____	DHY 108	Radiology	3
_____	DHY 110	Clinical Dental Hygiene I Lecture	2
_____	DHY 111	Clinical Dental Hygiene I Lab	3
_____	DHY 112	Biochemistry Fundamentals for Dental Hygienists	3
_____	DHY 200	Periodontology	4
_____	DHY 201	Clinical Dental Hygiene II Lecture	2
_____	DHY 202	Clinical Dental Hygiene II Lab	4
_____	DHY 205	Oral Pathology	4
_____	DHY 206	Pharmacology and Pain Control	3
_____	DHY 207	Community Dental Health	4
_____	DHY 208	Clinical Dental Hygiene III Lecture	2
_____	DHY 209	Clinical Dental Hygiene III Lab	4

(continued)

_____	DHY 212	Nutrition	2
_____	DHY 213	Clinical Dental Hygiene IV Lecture	2
_____	DHY 214	Clinical Dental Hygiene IV Lab	4
_____	DHY 220	Clinical Dental Hygiene V Lecture	2
_____	DHY 221	Clinical Dental Hygiene V Lab	4

Early Childhood Care and Education

The Early Childhood Care and Education associate degree program is a sequence of courses designed to prepare students for careers in child care 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 early childhood care and education theory and practical application necessary for successful employment. Program graduates receive an Associate of Applied Science degree in Early Childhood Care and Education and have the qualification of early childhood care and education paraprofessional.

NOTE: Prior to enrolling in a practicum or internship, students must provide the following documentation:

a. Satisfactory criminal record check .Georgia law prohibits the placement of persons with criminal records in childcare facilities. Anyone convicted of felony offenses, neglecting or abusing a dependent person, sexual offenses, or any other "covered crime" cannot work in childcare facilities. Students affected by this law, or who think they might be, should discuss their situations immediately with their advisors. Because their employment options may be severely limited in the early childhood profession, applicants who receive unsatisfactory criminal records checks are discouraged from pursuing the Early Childhood Care and Education programs of study and may need to consider other options.
b. Verification of liability insurance.
c. Basic cardiac life support and first aid training.
d. Verification of health and accident insurance.

Career Opportunities

Graduates may find employment as preschool teachers or paraprofessionals in public or private schools, private household childcare workers, self-employed childcare providers, nursery school attendants, or Head Start teachers.

Credit Required for Graduation: Minimum of 110 hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
_____	ENG 195	Technical Communications	5
	-or-		
_____	SPC 191	Fundamentals of Speech	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SOC 191	Introduction to Sociology	5
	-or-		
_____	General Core Elective at 191 levels or above		(5)

(continued)

Occupational Courses

_____	ECE 101	Introductions to Early Childhood Care and Ed.	5
_____	ECE 103	Human Growth and Development I	5
_____	ECE 105	Health, Safety, and Nutrition	5
_____	ECE 112	Curriculum Development	3
_____	ECE 113	Art for Children	3
_____	ECE 114	Music and Movement	3
_____	ECE 115	Language Arts and Literature	5
_____	ECE 116	Math and Science	5
_____	ECE 121	ECCE Practicum I	3
	-or-		
_____	ECE xxx	Program Elective	(5)
_____	ECE 122	ECCE Practicum II	3
	-or-		
_____	ECE xxx	Program Elective	(5)
_____	ECE 201	Exceptionalities	5
_____	ECE 202	Social Issues and Family Involvement	5
_____	ECE 224	Early Childhood Education Internship	12

-and-

Completion of Specialization

Paraprofessional Specialization Courses

_____	ECE 203	Human Growth and Development	5
_____	ECE 211	Methods and Materials	5
_____	ECE 212	Professional Practices	5

Occupational Elective Courses

_____	ECE 132	Infant/Toddler Development	5
_____	ECE 134	Infant/Toddler Group Care	5

Electronics Technology

The Electronics Technology associate degree program is a sequence of courses that 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. Program graduates receive an Associate of Applied Science degree in Electronics Technology, which qualifies them as electronics technicians with a specialization in computer electronics, general electronics, industrial electronics, or telecommunications electronics.

Career Opportunities

Graduates may find employment as a specialized industrial or specialized general electronics technician, assembler, tester, repairer, and calibrator.

Credit Required for Graduation: Minimum of 102 credit hours

	Program Courses		**Credits**
	General Core Courses (All specializations)		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	ENG 195	Technical Communications	5
_____	MAT 191	College Algebra	5
_____	MAT 194	Precalculus	5
_____	PSY 191	Introductory Psychology	5
	-or-		
_____	ECO 191	Principles of Economics	(5)
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses (All specializations)		
_____	ELC 104	Soldering Technology	2
_____	ELC 108	Direct Current Circuits II	4
_____	ELC 110	Alternating Current Circuits II	4
_____	ELC 115	Solid State Devices II	4
_____	ELC 117	Linear Integrated Circuits	4
_____	ELC 118	Digital Electronics I	4
_____	ELC 119	Digital Electronics II	4
_____	ELC 120	Microprocessors Fundamentals	4
_____	IFC 100	Industrial Safety Procedures	2

(continued)

_____	IFC 101	Direct Current Circuits I	4
_____	IFC 102	Alternating Current I	4
_____	IFC 103	Solid State Devices I	4

Specific Occupational Courses (Computer Electronics Technology Specialist)

_____	ELC 217	Computer Hardware	7
_____	ELC 218	Operating Systems Technologies	7
_____	ELC 219	Networking I	4
_____	ELC 286	CompTIA A+ Certification Prep	5
_____	Technically Related Electives		2

Specific Occupational Courses (General Electronics Technology Specialist)

_____	ELC 123	Communication Electronics Survey	7
_____	ELC 124	Industrial Electronics	4
_____	Technically Related Electives		14

Specific Occupational Courses (Industrial Electronics Technology Specialist)

_____	ELC 211	Process Controls	6
_____	ELC 212	Motor Controls	6
_____	ELC 213	Programmable Controllers	5
_____	ELC 214	Mechanical Devices	3
_____	ELC 215	Fluid Power	3
_____	ELC 216	Robotics	2

Specific Occupational Courses (Telecommunications Electronics Technology Specialist)

_____	ELC 217	Computer Hardware	7
_____	ELC 219	Networking I	4
_____	ELC 259	Fiber Optic Systems	4
_____	ELC 260	Telecommunication and Data Cabling	4
_____	ELC 261	Telecommunication Systems Installation and Programming	3
_____	ELC 262	Telecommunications and Data Transmission Concepts	3

Marketing Management

The Marketing Management associate degree program prepares students for employment in a variety of positions in today's marketing and management fields. The 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 marketing management. Program graduates receive an Associate of Applied Science degree in Marketing Management. Each course within all of West Central Technical College's diploma/certificate level programs is acceptable for full credit toward the Occupationally Related Elective or General Elective hours for this associate degree.

Career Opportunities

Graduates may find employment as buyers, advertising managers, retail store managers, tellers, general merchandise salesperson, merchandise displayers, department managers, or any of many other marketing related jobs. Any of the above employment opportunities should provide the graduate experience to assist in opening his/her own business.

Credit Required for Graduation: Minimum of 98 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ECO 191	Principles of Economics	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SPC 191	Fundamentals of Speech	5
	Occupational Courses		
_____	ACC 101	Principles of Accounting I	6
_____	ACC 155	Legal Environment of Business	5
	-or-		
_____	MKT 103	Business Law	(5)
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 106	Fundamentals of Selling	5
_____	MKT 108	Advertising	4

(*continued*)

_____	MKT 109	Visual Merchandising	4
	-or-		
_____	MKT 232	Advanced Selling	(4)
_____	MKT 110	Entrepreneurship	8
_____	MKT 122	Buying & Merchandise Management	5
	-or-		
_____	MKT 228	Advanced Marketing	(5)
_____	MKT 130	Marketing Administrations O.B.I. I	3
_____	MKT 131	Marketing Administration O.B.I. II	3

Occupational Elective Courses (12 credits from the list below)

_____	ACC 102	Accounting	6
_____	ACC 103	Principles of Accounting	6
_____	ACC 104	Computerized Accounting	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 103	Advanced Document Processing	5
_____	BUS 105	Data Base Fundamentals	5
_____	BUS 106	Office Procedures	5
_____	BUS 108	Word Processing	7
_____	BUS 202	Spreadsheet Fundamentals	3
_____	CIS 103	Operating Systems Concepts	6
_____	MKT 123	Small Business Management	5

Radiologic Technology

The Radiologic Technology program offers students a 24-month program in the study of diagnostic radiography. This course leads to an Associate of Applied Science degree and eligibility to become a registered radiographer through the American Registry of Radiologic Technologists (ARRT).

The Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (20 N. Wacker Dr. Suite 2850, Chicago, IL 60606-3182, phone 312.704.5300, www.jrcert.org).

NOTE: The Radiologic Technology program is located on the Douglas campus and is available in day classes.

Students will have the opportunity to learn about all applications of diagnostic imaging, including routine radiography and fluoroscopy, trauma radiography, surgical and mobile radiography, pediatric radiography, as well as sub-specialty modalities such as computed tomography (CT), magnetic resonance imaging (MRI), ultrasound and nuclear medicine, and radiation therapy.

In order to receive a wide variety of experience, students will receive clinical assignments in a number of clinical environments such as WellStar Douglas Hospital, WellStar Cobb Hospital, Tanner Health System, Atlanta Medical Center, Children's Healthcare of Atlanta (Scottish Rite Campus), and Kaiser Permanente sites. Travel will be required to all clinical sites.

To ensure the program meets local needs and national accreditation standards, the Radiologic Technology Advisory Committee, comprised from local medical communities, assists in reviewing and updating program material and course content.

Aptitudes and Interests: Radiographers must be able to learn and apply theoretical and technical knowledge. They must be able to work under stress while maintaining professionalism, and be accurate and precise with established protocols. They should demonstrate empathy and exceptional customer service skills.

Physical Requirements: Employers may place physical requirements on various jobs in this career field. West Central Technical College strongly encourages students to investigate these physical requirements with employers to determine their employability before entering into this program.

Career Opportunities
Graduates may find employment as registry eligible Radiologic Technologist in the diagnostic field of radiology and after passage of the National Registry as Registered Radiologic Technologist.

Competitive Selection Process
Level I: Radiologic Technology Preparatory/Core Courses
The annual Level I deadline is April 1.

The following requirements must be completed by the April 1 deadline to be eligible for the Radiologic Technology program selection. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.

- Must complete the following courses with a minimum grade of *C*: AHS 109, BIO 193, BIO 194, ENG 191, MAT 190 or MAT 191, and PSY 191.
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at (770) 537-7942. There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.
- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Services up on completion of the required courses and attach a copy of his or her CPR certification card and a copy of the PSB Health Occupations Aptitude Exam score report.

Level II: Radiologic Technology Competitive Selection

The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 75% of the overall score
- The score on the Psychological Services Bureau Allied Health Aptitude Test will comprise 25% of the overall score
- Students with the highest overall scores will be selected for program admission

Level III: Radiological Technology Occupational and Clinical Courses

Students selected for admission to the Radiological Technology program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each summer quarter.

Credit Required for Graduation: Minimum of 138 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	(5)
_____	PSY 191	Introductory Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SPC 191	Fundamentals of Speech	5
	Occupational Courses		
_____	AHS 104	Introduction to Health Care	3
_____	AHS 109	Medical Terminology	3
_____	BIO 193	Anatomy and Physiology I	5

(*continued*)

_____	BIO 194	Anatomy and Physiology II	5
_____	RAD 101	Introduction to Radiologic Technology	5
_____	RAD 103	Body, Trunk and Upper Extremity Procedures	3
_____	RAD 106	Lower Extremity and Spine Procedures	3
_____	RAD 107	Principles of Radiographic Exposure I	4
_____	RAD 109	Contrast Procedures	3
_____	RAD 113	Cranium Procedures	2
_____	RAD 116	Principles of Radiation Exposure II	3
_____	RAD 117	Radiographic Imaging Equipment	4
_____	RAD 119	Radiologic Pathology and Medical Terminology	3
_____	RAD 120	Principles of Radiation Biology and Protection	5
_____	RAD 123	Radiologic Science I	5
_____	RAD 126	Radiologic Technology Review	4
_____	RAD 132	Clinical Radiography I	4
_____	RAD 133	Clinical Radiography II	7
_____	RAD 134	Clinical Radiography III	7
_____	RAD 135	Clinical Radiography IV	7
_____	RAD 136	Clinical Radiography V	7
_____	RAD 137	Clinical Radiography VI	9
_____	RAD 138	Clinical Radiography VII	9

Registered Nursing - Associate Degree in Nursing (ADN)

The ADN program is designed to provide nursing courses that when successfully completed awards graduates an Associate of Applied Science degree in Registered Nursing. Graduates are then eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Upon successful completion of the NCLEX-RN and licensure by the Georgia Board of Nursing, graduates are employable as registered nurses.

The Associate Degree Nursing program is approved by the Georgia Board of Nursing, 237 Coliseum Drive, Macon, Georgia 31217-3858, phone 478. 207.1640.

NOTE: According to the position statement of the National Organization for Associate Degree Nursing (NOADN) (2006), ADN graduates are recognized as essential members of the interdisciplinary healthcare team in diverse health care settings. The ADN faculty is committed to the NOADN tenants of advocacy, professional involvement, life-long learning and leadership and to this end the College supports student participation and involvement in the learning environment.

Students are admitted to the ADN program in the fall quarter each year.

Career Opportunities
Graduates may find these opportunities in a wide variety of settings, including, but not limited to acute care in hospitals and long term care facilities, outpatient clinics, physicians' offices, home health care agencies, private or governmental industries, schools and hospice programs.

Competitive Selection Process
Level I: Registered Nursing Preparatory/Core Courses
The annual Level I deadline is April 1.

The following requirements must be completed by the April 1 deadline to be eligible for the Registered Nursing program selection. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of *C*: BIO 193, BIO 194, ENG 191, MAT 191, and PSY 191.
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must submit a Competitive Progression File Review Request to the Office of Student Services upon completion of the required courses and attach a copy of the CPR certification card and a copy of the Official NLN Pre-RN Admissions Entrance Examination score report.
- Additionally, any student who has six or more months work experience in a clinical setting may submit a letter of verification from the employer. The letter must be attached to the Competitive Progression File Review Request and received by the April 1 deadline to be considered in the scoring process. Students are not required to have work experience in a clinical setting to complete Level I requirements or enter the Level II Competitive Selection.

Level II: Registered Nursing Competitive Selection

The competitive selection is based on the following scoring process:

- The score earned on the National League for Nursing (NLN) Pre-RN Admission Entrance Examination will comprise 50% of the overall score.
- The academic performance demonstrated in the required Level I courses will comprise 25% of the overall score.
- Students with the top academic scores will then be selected for a committee interview.
- The interview will comprise an additional 25% of the overall score.
- Students with the highest overall scores will be selected for program admission.
- Students with six months documented clinical work experience will receive one (1) point in the overall score.
- Students with the highest overall score will be selected for program admission.
- However, at any time that there are more students with the same overall score than there are seats available, a lottery system will be used to establish seating order among these students. Those students within the lottery group not receiving a seat during the current year will be enrolled in the next cohort.

Level III: Registered Nursing Occupational and Clinical Courses

Students selected for admission to the Registered Nursing program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each fall quarter.

Credit Required for Graduation: Minimum of 108 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	BIO 193	Anatomy and Physiology I	5
_____	BIO 194	Anatomy and Physiology II	5
_____	BIO 197	Introductory Microbiology	5
_____	ENG 191	Composition and Rhetoric	5
_____	ENG 193	Literature and Composition	5
	-or-		
_____	HUM 191	Introductions to Humanities	(5)
_____	MAT 191	College Algebra	5
_____	PSY 191	Introductory Psychology	5
_____	PSY 291	Human Growth and Development	5
_____	SCT 100	Introduction to Microcomputers	3
_____	SOC 191	Introduction to Sociology	5

(*continued*)

_____	SPC 191	Fundamentals of Speech	(5)

***Listed courses are pending approval from the Georgia Board of Nursing*

Occupational Courses

_____	NUR 194	Introduction to Nursing Practice	9
_____	NUR 195	Adult Health I	9
_____	NUR 196	Adult Health II	9
_____	NUR 294	Parent Child Health	9
_____	NUR 295	Adult Health III	9
_____	NUR 296	Transitions to Professional Practice	10

Technical Studies

The Associate of Applied Science degree in Technical Studies degree is intended to produce graduates who are prepared for upward mobility or cross training in various career fields. A student who is a candidate for the AAS in Technical Studies must have graduated from or be eligible to graduate from a diploma program in a field appropriate to the degree area.

The total program must be a minimum of 90 quarter credit hours, to include a minimum of 30 credits in general education and 60 credits in occupational preparation as specified below. Credit hours earned in occupational preparation may be used as all or part of the other 60 credit hours required. Students interested in applying for the AAS in Technical Studies should see their advisors to begin the request process. The advisor-approved proposal for this customized program is to be submitted to the Dean of Instruction for review and then to the Vice President for Academic Affairs for approval.

NOTE: All courses counting towards the 60 credit minimum must be taught by an instructor credentialed at a level qualifying him or her to teach in an AAS program (normally a minimum of an associate degree). Courses beyond the 60-credit minimum necessary to fulfill the requirement of completion of the diploma program may be taught by instructors credentialed only at the diploma program level, but will not be transferred into the degree program.

Diploma level English, mathematics, science, psychology, and employment courses (DTAE courses not numbered in the 190s or 290s) may count toward the 60-credit minimum for occupational preparation courses but will not be applicable to the general education requirement above, regardless of the credentials of the instructor.

Career Opportunities
Graduates are usually already employed, and are upgrading skills in these specific course areas, or are cross-training for better productivity within their particular companies.

Credit Required for Graduation: Minimum of 90 credit hours

Occupational Preparation Courses
The program must include a minimum of 60 credit hours of occupational preparation courses. In most cases, completion of the requirements of a diploma program will meet this requirement, but in all cases the following additional requirements must be met.

These courses must include a course providing computer literacy (normally SCT 100). The program must include a minimum of 30 quarter credit hours in general education courses.

General Education Courses
General education courses may be taken at the technical college or another accredited college or a combination of the two and must include the following:

_____ One course in Freshman English or Communications (DTAE course ENG 191)

_____ One course in Humanities (DTAE course ENG 193 or HUM 191)

_____ One course with a significant component in speech communications (DTAE course SPC 191 or ENG 195)

_____ One course in the social or behavioral sciences (DTAE courses ECO 191, SOC 191, PSY 191)

(*continued*)

_____ One course in mathematics (DTAE courses MAT 190, MAT 191, or MAT 196; MAT 196 is not offered through West Central but may be transferred in to meet this requirement)

_____ Additional courses in the above areas or natural sciences to reach the total of 30 quarter credit hours

Diploma Programs

West Central offers diploma programs in various occupational fields. The Technical College System of Georgia governs these programs by standards that provide uniform requirements for all technical institutes. Satisfactory completion of course work carries diploma credit. Diploma credit is transferable to other technical colleges within the statewide system.

Accounting

Air Conditioning Technology

Applied Manufacturing Technology

Automated Manufacturing Technology

Automotive Technology

Barbering

Business Office Technology
- *Business Office Specialist*
- *Medical Office Specialist*

Computer Information Systems
- *Computer Support Specialist*
- *Networking Specialist*

Cosmetology

Criminal Justice

Culinary Arts

Early Childhood Care and Education

Electronics Technology
- *General*
- *Industrial*
- *Computer*
- *Telecommunications*

Industrial Electrical Technology

Machine Tool Technology

Marketing Management

Medical Assisting

Paramedic Technology

Practical Nursing

Surgical Technology

Accounting

The Accounting program is a sequence of courses designed to prepare students for careers in the accounting profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of accounting theory and practical application necessary for successful employment using both manual and computerized accounting systems.

Program graduates receive basic skills training in business communications, interpersonal relations, business math, and microcomputer awareness. Areas covered in this program include maintaining a set of books for business entities, account classifications, subsidiary record accounting, corporate accounting, cost accounting, payroll, computerized accounting, database and spreadsheet fundamentals, and word processing. The program emphasizes a combination of accounting theory and practical application necessary for successful employment using both manual and computerized accounting. Program graduates receive an Accounting diploma which qualifies them as accounting technicians.

NOTE: The three keys for successful completion of the Accounting program are (1) Attendance, (2) Dedication, and (3) Self-Confidence. The program is not difficult, provided students meet these objectives. Because the time spent in class is longer than in some other courses, attendance is important. A student must also be dedicated to doing the homework, which can be time consuming but usually better provides for long term retention of the subject matter. Finally, students need to have confidence in themselves to succeed. A determination to do the work and the confidence that they can do it will be the driving force to understanding the material.

Career Opportunities
Graduates may find employment as bookkeepers or accounting clerks in the areas of accounts receivable or accounts payable.

Credit Required for Graduation: Minimum of 73 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 111	Business English	5
_____	ENG 112	Business Communications	5
_____	MAT 111	Business Math	5
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	ACC 101	Principles of Accounting I	6
_____	ACC 102	Principles of Accounting II	6
_____	ACC 103	Principles of Accounting III	6
_____	ACC 104	Computerized Accounting	3
_____	ACC 106	Accounting Spreadsheet Fundamentals	5

(*continued*)

_____	ACC 152	Payroll Accounting	4
_____	BUS 101	Beginning Document Processing	5
_____	BUS 108	Word Processing	7

Occupational Elective Courses (12 credits from the list below)

_____	ACC 120	Principles of Auditing	5
_____	ACC 150	Cost Accounting	6
_____	ACC 151	Individual Tax Accounting	4
_____	ACC 155	Legal Environment of Business	5
_____	ACC 156	Business Tax Accounting	4
_____	ACC 164	Bookkeeper Certification Review	4
_____	BUS 105	Database Fundamentals	3
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 110	Entrepreneurship	8

Air Conditioning Technology

The Air Conditioning Technology Program provides instruction on how to service, repair and install residential heating and air conditioning systems. Students may enter day and evening classes at the beginning of any quarter as openings become available. Students will start in either basic refrigeration or basic electricity. After completion of all basic classes students will then move on to the advanced classes including system design, duct design, air conditioning installation and troubleshooting, gas heating installation and troubleshooting, and heat pump and related systems installation and troubleshooting.

NOTE: The Partnership for Air Conditioning, Heating, and Refrigeration Accreditation (PAHRA) has been established and endorsed by the air conditioning industry. All graduating students are required to take the Industry Competency Exam (ICE) and the EPA Refrigerant Handling Certification Exam.

To make the most of the time spent in the class/lab, reading assignments should be completed outside of class. The video, computer, and lab assignments must be completed on campus. Limited live work may be performed to provide "real-world" experience. Working in the air conditioning industry while attending class will promote learning by providing a relationship between what is taught in class and what is used in the industry.

Career Opportunities
Graduates may find employment as service technicians, installers, or manufacturer representatives, as well as in plant maintenance or sales.

Credit Required for Graduation: Minimum of 91 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	MAT 101	General Mathematics	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	ACT 100	Refrigeration Fundamentals	4
_____	ACT 101	Principles and Practices of Refrigeration	7
_____	ACT 102	Refrigeration System Component	7
_____	ACT 103	Electrical Fundamentals	7
_____	ACT 104	Electrical Motors	4
_____	ACT 105	Electrical Components	5
_____	ACT 106	Electrical Control System and Installation	4
_____	IFC 100	Industrial Safety Procedures	2
_____	ACT 107	Air Conditioning Principles	8

(*continued*)

_____	ACT 108	Air Conditioning Principles/Installation	3
_____	ACT 109	Troubleshooting AC Systems	7
_____	ACT 110	Gas Heating Systems	5
_____	ACT 111	Heat Pumps and Related Systems	6

*Occupational Elective Courses (5 credits from the list below * or Internship)*

_____	AUT 142	Climate Control Systems	6
_____	ELT 106	Electrical Prints, Schematics and Symbols	3
_____	ELT 107	Commercial Wiring I	4
_____	ELT 120	Residential Wiring I	5
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5
_____	WLD 133	Metal Welding and Cutting Techniques	3

Applied Manufacturing Technology

Applied Manufacturing Technology is a program developed to offer business and industry employees an educational opportunity which will recognize successful work experience and provide further technical and academic course work.

This program is customized to individual students and industries to ensure appropriate training. Customization of the curriculum is accomplished by offering different fundamental technical courses, based on individual needs. A core of academic courses provides students with English, mathematics, and social science skills.

The program consists of three parts:

1. A core of general education courses
2. Selected technical courses
3. Academic credit for related work experience

The program is intended to produce diploma graduates who possess competencies as required by the agreement between a participating company and West Central Technical College. Graduates will receive a diploma in Applied Manufacturing Technology.

Career Opportunities

The Applied Manufacturing Technology program is intended to produce graduates who are prepared for upward mobility or cross-trained in various manufacturing fields. A major component of the program is the awarding of academic credit for successful related work experiences.

Credit Required for Graduation: Minimum of 65 credit hours

	General Core Courses		**Credits**
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	EMP 100	Interpersonal Relations and Prof. Development	3
_____	SCT 100	Introduction to Microcomputers	3

Work Based Courses/Learning Activities

Work-based learning will total a minimum of 20 credit hours (600 contact hours). Three contact hours of occupational-based instruction (OBI) per week for the duration of a quarter equals one quarter hour. Occupational-based instruction is defined as instruction that emphasizes supervised-with-experience activities requiring the application of occupational competencies.

Application of Work Based Learning Credits toward AMT Diploma Program

- O.B.I. credit through Work Based Learning (WBL) is awarded only within the AMT program
- Maximum number of WBL credits that may be counted toward a diploma is 20
- WBL credit may not:
    - Count toward residency requirement
    - Meet general education requirements

Portfolio Preparation and Submission

The means to have work or training experiences evaluated for possible college credit awards includes submitting a portfolio. The portfolio contains a student's written self-assessment of what has been learned through his/her experiences. Proof of these experiences in the form of documentation must accompany each self-assessment.

WBL briefings are held at various companies around the service area depending on student demand. A Work Based Learning Assessment Team (PLAT) member usually conducts the one-hour briefing and presents an overview of the application and portfolio development process. Contact the Dean of Academic Affairs to inquire about a Work-Based Learning briefing.

Completed portfolios are sent to the Dean of Academic Affairs, Work Based Learning, West Central Technical College, 176 Murphy Campus Blvd., Waco, GA 30182. After the portfolio has been reviewed, credits are applied to transcript by means of courses AMF 301, AMF 302, AMF 303, AMF 304 and AMF 305; each course provides 5 credit hours.

Automated Manufacturing Technology

The Automated Manufacturing Technology diploma program sequence of carefully developed courses designed to prepare students to work as technicians in one of the various specialties in the field. Program graduates are to be competent in the general areas of communications, mathematics, and interpersonal relations. In addition, graduates are to be competent to install, program, operate, maintain, service, and diagnose electromechanical equipment used in automated manufacturing applications. Program graduates receive a diploma in Automated Manufacturing Technology.

Career Opportunities

Career opportunities offer a wide range of employment possibilities in the manufacturing, processing, and production related industries. The primary types of jobs include installation and maintenance of components and systems in a highly automated factory that involve computer integration and robotic applications for producing parts or other products, and handling materials and finished products.

Credit Required for Graduation: Minimum of 87 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 103	Algebraic Concepts	5
_____	EMP 100	Interpersonal Relations and Prof. Development	3
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	IFC 100	Industrial Safety Procedures	2
_____	IFC 101	Direct Current Circuits I	4
_____	IFC 102	Alternating Current I	4
_____	IFC 103	Solid State Devices	4
_____	AMF 103	Manufacturing Processes Survey	4
_____	AMF 106	Introduction to Robotics	4
_____	AMF 108	App. Hydraulics, Pneumatics, and Mechanisms	3
_____	AMF 113	Programmable Controllers I	4
_____	AMF 115	Manuf. Control and Work Cell Interfacing	5
_____	AMF 206	Work Cell Design Laboratory	3
_____	AMF 207	Flexible Manufacturing Systems I	4
_____	AMF 208	Flexible Manufacturing Systems II	4
_____	AMF 209	Flexible Manufacturing Systems Project	2
_____	AMF 214	Programmable Controllers II	4

(*continued*)

_____	DDF 107	Introduction to CAD	6
_____	ELC 117	Linear Integrated Circuits	4
_____	ELT 118	Electrical Controls	5
_____	MCH 118	Computer/CNC Literacy	5

Automotive Technology

The Automotive Technology program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. The program emphasizes a combination of automotive mechanics theory and the practical application necessary for successful employment. The Automotive Technology Diploma program prepares students for maintenance, troubleshooting, and repair of automobiles. Safety practices, environmental concerns, and proper use of tools and equipment are also taught. The lab sessions closely simulate the actual work environment. The laboratory portion of the program is flexible, to allow for individual student needs and differences. Due to the increase in electronic technology in the automotive field, emphasis is placed on electrical and electronic principles in addition to troubleshooting. Students are also trained in customer and employee relations. Program graduates receive an Automotive Technology diploma, which qualifies them as automotive technicians. Competencies are taught to prepare the student for the Automotive Service Excellence (ASE) certification examination.

NOTE: Employers in this field look for people with strong communication and analytical skills. Technicians need good reading, mathematics, and computer skills to study technical manuals and to keep abreast of new technology and learn new service and repair procedures and specifications.

Career Opportunities
Graduates may find employment as automotive technician apprentices, technician's helpers, service writers, general service technicians, and maintenance technicians.

Credit Required for Graduation: Minimum of 103 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	EMP 100	Interpersonal Relations and Prof. Development	3
_____	SCT 100	Introduction to Microcomputers	3

NOTE: *Students are encouraged to complete the core courses first—before the bulk of their program courses—instead of waiting until closer to program completion.*

	Occupational Courses		
_____	AUT 120	Introduction to Automotive Technology	3
_____	AUT 122	Introduction to Automotive Electrical	6
_____	AUT 124	Starting and Charging Systems	4
_____	AUT 126	Engine Principles of Operation and Repair	6
_____	AUT 128	Fuel, Ignition and Emission Systems	7
_____	AUT 130	Brake Systems	4
_____	AUT 132	Suspension and Steering Systems	4
_____	AUT 134	Drivelines	4

(*continued*)

_____	AUT 138	Manual Transmission/Transaxle	4
_____	AUT 140	Electronic Engine Control Systems	7
_____	AUT 142	Climate Control Systems	6
_____	AUT 144	Introduction to Automatic Transmissions	4
_____	AUT 210	Automatic Transmission Repair	7
_____	AUT 212	Advanced Electronic Transmission Diagnosis	3
_____	AUT 214	Advanced Electronic Controlled Brake System Diagnosis	4
_____	AUT 216	Advanced Electronic Controlled Susp. and Steering Sys.	4
_____	AUT 218	Advanced Electronic Engine Control Systems	4
_____	AUT 220	Automotive Technology Internship	6
	-or-		
_____	Electives (6 credits from the list below)		
	-or-		
_____	MCH 101	Introduction to Machine Tool	6
	-or-		
_____	WLD 100	Introduction to Welding Technology	6

Barbering

The Barbering program is a sequence of courses that prepare 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 technical diploma in Barbering.

Career Opportunities
Graduates may be employable as barbers, salon/shop managers, or salon/shop owners.

Credit Required for Graduation: Minimum of 79 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	EMP 100	Interpersonal Relations & Prof. Development	3
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	BAR 100	Introduction to Barber/Styling	3
_____	BAR 101	Introduction to Barber/Styling Implements	2
_____	BAR 102	Science: Sterilization, Sanitation, and Bacteriology	3
_____	BAR 103	Introduction to Haircutting	7
_____	BAR 104	Shampooing	2
_____	BAR 105	Haircutting/Introduction to Styling	4
_____	BAR 106	Shaving	3
_____	BAR 107	Science: Anatomy and Physiology	5
_____	BAR 108	Color Theory	4
_____	BAR 109	Introduction to Chemical Restructuring of Hair	2
_____	BAR 110	Haircutting/Styling	4
_____	BAR 112	Chemical Restructuring Application	3
_____	BAR 113	Structure of Skin, Scalp and Hair	2
_____	BAR 114	Skin, Scalp, and Hair	1
_____	BAR 115	Facials and Facial Treatment Procedures	1
_____	BAR 116	Haircutting/Styling	4

(*continued*)

_____	BAR 117	Therapeutic Electrical Devices	1
_____	BAR 118	Color Applications	2
_____	BAR 119	Chemical Restructuring	3
_____	BAR 120	Barber/Styling Practicum/Internship	3
_____	BAR 121	Shop Management/Ownership	4

Business Office Technology

The Business Office Technology program is designed to prepare students for employment in a variety of positions in today's administrative and business fields. The program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes use of the keyboard and applications software. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of business office technology.

NOTE: The Business and Office Technology program uses a combination of lecture and lab classes. The office tasks help students apply theory to practical situations. Job samples give students responsibility for planning, coordinating, controlling and completing activities used in offices and businesses.

Many BOT students have found that by selecting electives carefully, they were able to obtain several technical certificates. Students should speak with their academic advisors regarding possibilities in relation to their specific needs. BOT advisors recommend taking BUS 101, 102, and 103 sequentially for greater keyboarding success.

Career Opportunities

Graduates of the program receive a Business Office Technology diploma with a specialization in one of the following: business office specialist; legal office specialists; or medical office specialists. The variety of positions in this area has grown tremendously and is expected to continue on the upward trend in the future.

Credit Required for Graduation: Minimum of 71 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 111	Business English	5
_____	ENG 112	Business Communication	5
_____	MAT 111	Business Math	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses (all specializations)		
_____	ACC 101	Principles of Accounting I	6
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 103	Advanced Document Processing	5
_____	BUS 108	Word Processing	7
	Specific Occupational Courses (Business Office Specialization)		
_____	BUS 105	Database Fundamentals	3
_____	BUS 106	Office Procedures	5

(*continued*)

_____	BUS 107	Machine Transcription	3
_____	BUS 201	Advanced Word Processing	3
_____	BUS 202	Spreadsheet Fundamentals	3
_____	Electives		5
	Occupational Elective Courses (5 credits from list below)		5
_____	ACC 102	Principles of Accounting II	6
_____	BUS 161	Desktop Publishing I	5
_____	BUS 162	Desktop Publishing II	5
_____	BUS 230	PowerPoint	5
_____	BUS 235	Advanced Access	5
_____	BUS 240	Advanced Excel	5
_____	BUS 263	Electronic Mail Fundamentals	3
	Specific Occupational Courses (Medical Office Specialization)		
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 109	Medical Terminology	3
_____	BUS 213	Medical Document Processing Transcription	5
_____	BUS 216	Medical Office Procedures	5
_____	BUS 226	Medical Office Coding, Billing and Insurance	5

Computer Information Systems: Computer Support Specialist

The Computer Information Systems—Computer Support Specialist—diploma program is designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Program graduates receive a Computer Information Systems Computer Support Specialist diploma and are qualified for employment as computer support specialists.

NOTE: Program courses in Computer Information Systems require strong aptitudes for math, problem solving, critical thinking, listening, teamwork, and written direction.

Career Opportunities
Graduates may find employment in end-user support, systems integration, PC repair/installation, LAN hardware support, commercial software support, and computer hardware/software sales.

Credit Required for Graduation: Minimum of 90 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 111	Business English	5
_____	ENG 112	Business Communications	5
_____	MAT 103	Algebraic Concepts	5
	-or-		
_____	MAT 111	Business Math	(5)
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CIS 103	Operating Systems Concepts	6
_____	CIS 105	Program Design and Development	5
_____	CIS 106	Computer Concepts	5
_____	CIS 122	Microcomputer Installation and Maintenance	7
_____	CIS 127	Adv. Word Processing and Desktop Publ. Techniques	6
_____	CIS 1140	Networking Fundamentals	6
_____	CIS 2228	Comprehensive Spreadsheet Techniques	6
_____	CIS 2229	Comprehensive Database Techniques	6
	-and-		
	(Completion of one of the following language courses is required.)		
_____	CIS 157	Intro. to Windows Progrmg. Using Microsoft Visual Basic	7
	-or-		
_____	CIS 252	Introduction to Java Programming	(7)

(Students must take an additional 15 credit hours from occupationally appropriate courses, pending advisor approval, in order to fulfill the minimum requirements for the Computer Support Specialist diploma.)

(continued)

Occupational Elective Courses (15 credits from the list below)

_____	ACC xxx	Accounting course	x
_____	BUS xxx	Business course	x
_____	CIS 260	Introduction to Fourth Generation Languages	7
_____	CIS 2211	Web Site Design Tools	6
_____	CIS xxx	Any CIS course not already req. in current diploma/degree	x
_____	MKT xxx	Marketing Management course	x

Computer Information Systems: Networking Specialist

The Computer Information Systems—Networking Specialist—diploma program is designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Program graduates receive a Computer Information Systems Networking Specialist diploma and are qualified for employment as computer programmers, microcomputer specialists, or networking specialists.

NOTE: Program courses in Computer Information Systems require strong aptitudes for math, problem solving, critical thinking, listening, teamwork, and written direction.

Career Opportunities
Graduates may find employment in network installation and maintenance, network administration, network operating systems support, and hardware repair/maintenance.

Credit Required for Graduation: Minimum of 90 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 111	Business English	5
_____	ENG 112	Business Communications	5
_____	MAT 103	Algebraic Concepts	5
	-or-		
_____	MAT 111	Business Math	(5)
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CIS 103	Operating Systems Concepts	6
_____	CIS 105	Program Design and Development	5
_____	CIS 106	Computer Concepts	5
_____	CIS 122	Microcomputer Installation and Maintenance	7
_____	CIS 1140	Networking Fundamentals	6
	-and-		
	(Completion of one of the following language courses is required.)		
_____	CIS 157	Introduction to Visual BASIC Programming	7
	-or-		
_____	CIS 252	Intro to Java Programming	(7)
	Networking Specialty Courses (Prepares student for Microsoft Windows Certification)		
_____	CIS 2149	Implementing Microsoft Windows Professional	6
_____	CIS 2150	Implementing Microsoft Windows Server	6
_____	CIS 2153	Implementing MS Win Networking Infrastructure	6
_____	CIS 2154	Implementing MS Win Network Directory Services	6

(continued)

(Students must take an additional 9 credit hours from occupationally appropriate courses, pending advisor approval, in order to fulfill the minimum requirements for the Networking Specialist diploma.)

Occupational Elective Courses (9 credits from the list below)

_____	ACC xxx	Accounting course	x
_____	BUS xxx	Business course	x
_____	CIS 260	Introduction to Fourth Generation Languages	7
_____	CIS 2211	Web Site Design Tools	6
_____	CIS xxx	Any CIS course not already req. in current diploma/degree	x
_____	MKT xxx	Marketing Management course	x

Cosmetology

The Cosmetology program prepares students to take the Georgia State Board of Cosmetology Exam. Students must be 18 years of age to be eligible to take the exam. Laboratory experiences within the school salon include experience with customers in cutting, coloring, perming, relaxing, and conditioning hair. Other experiences include work with chemicals and practical experience dealing with the public. The Cosmetology program accepts new students quarterly. Licensing is granted only upon successful completion of the entire program and passing the state license exam.

NOTE: According to the Georgia State Board of Cosmetology, a person may be denied the opportunity to take the licensing examination and/or may be denied a license if the person has been convicted of a felony or any crime violating federal or state controlled substance laws or other grounds as specified by law.

Career Opportunities
Graduates may find employment as cosmetologists, receptionists, shampoo technicians, and manicurists.

Credit Required for Graduation: Minimum of 75 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	COS 100	Introduction to Cosmetology Theory	5
_____	COS 101	Introduction to Perm. Waving/Relaxing	2
_____	COS 103	Introduction to Skin, Scalp, and Hair	2
_____	COS 105	Introduction to Shampooing and Styling	4
_____	COS 106	Introduction to Haircutting	3
_____	COS 108	Permanent Waving and Relaxing	3
_____	COS 109	Hair Color	6
_____	COS 110	Skin, Scalp, and Hair	3
_____	COS 111	Styling	3
_____	COS 112	Manicuring and Pedicuring	3
_____	COS 113	Practicum I	4
_____	COS 114	Practicum II	8
_____	COS 115	Practicum/Internship I	4

(*continued*)

_____	COS 116	Practicum/Internship II	5
_____	COS 117	Salon Management	4

Criminal Justice

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of Criminal Justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields.

NOTE: Prospective students need to know that they will be required to meet all applicable employment requirements, including satisfactory background and criminal checks, in order to qualify for some internships and to gain employment in most law enforcement settings. A felony and/or aggravated misdemeanor conviction may bar students from completing the program.

Career Opportunities

Occupations include correctional officers, private detectives and investigators, security guards, and police and sheriff's patrol officers.

Credit Required for Graduation: Minimum of 73 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	PSY 101	Basic Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CRJ 101	Introduction to Criminal Justice	5
_____	CRJ 103	Corrections	5
_____	CRJ 104	Principles of Law Enforcement	5
_____	CRJ 105	Criminal Procedure	5
_____	CRJ 168	Criminal Law	5
_____	CRJ 202	Constitutional Law	5
_____	CRJ 207	Juvenile Justice	5
_____	CRJ 209	Criminal Justice Practicum/Internship	5
_____	CRJ 212	Ethics in Criminal Justice	5
	Occupational Elective Courses (10 credits from list below)		
_____	CRJ 162	Methods of Criminal Investigation	5

(*continued*)

_____	BUS 105	Database Fundamentals	3
_____	CIS 106	Computer Concepts	5
_____	ECE 202S	Social Issues & Family Involvement	5
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5

Culinary Arts

The Culinary Arts diploma program is a sequence of courses that prepares students for the culinary profession. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of culinary theory and practical application necessary for successful employment. Program graduates receive a Culinary Arts Diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the culinary field as cooks, bakers, or caterers/culinary managers.

Career Opportunities
Graduates will be prepared to pursue diverse opportunities in the culinary field as cooks, bakers, or caterers/culinary managers.

Credit Required for Graduation: Minimum of 92 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Prof. Development	3
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	CUL 100	Professionalism in Culinary Arts	3
_____	CUL 110	Food Service Sanitation and Safety	3
_____	CUL 112	Principles of Cooking	5
_____	CUL 114	American Regional Cuisine	5
_____	CUL 116	Food Service Purchasing and Control	3
_____	CUL 121	Baking Principles I	5
_____	CUL 122	Baking Principles II	5
_____	CUL 127	Banquet Preparation and Presentation	4
_____	CUL 129	Front of the House Services	3
_____	CUL 130	Pantry, Hors D' Oeuvres and Canapés	5
_____	CUL 132	Garde Manger	5
_____	CUL 133	Food Service Leadership and Decision Making	5
_____	CUL 137	Nutrition and Menu Development	3
_____	CUL 215	Contemporary Cuisine I	5

(*continued*)

_____	CUL 220	Contemporary Cuisine II	5
_____	CUL 216	Practicum/Internship	12
	-or-		
_____	CUL 124	Restaurants and Hotel Baking	(6)
	-and-		
_____	CUL 224	International Cuisine	(6)

Early Childhood Care and Education

The Early Childhood Care and Education program is a sequence of courses designed to prepare students for careers in child care 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 early childhood care and education theory and practical application necessary for successful employment. Program graduates receive an Early Childhood Care and Education diploma and have the qualification of early childhood care and education provider. To be employed in child care center, public schools, or Head Start centers, an individual must have a satisfactory criminal record check. Persons who have been convicted of a felony offense are not employable in this field. Evidence of a current satisfactory criminal record background check is required at the student's expense prior to participation in practicum or internship.

NOTE: Prior to enrolling in a practicum, students must provide the following documentation:

a. Satisfactory criminal record check. Georgia law prohibits the placement of persons with criminal records in childcare facilities. Anyone convicted of felony offenses, neglecting or abusing a dependent person, sexual offenses, or any other "covered crime" cannot work in childcare facilities. Students affected by this law, or who think they might be, should discuss their situations immediately with their advisors. Because their employment options may be severely limited in the early childhood profession, applicants who receive unsatisfactory criminal records checks are discouraged from pursuing the Early Childhood Care and Education programs of study and may need to consider other options.
b. Verification of liability insurance.
c. Basic cardiac life support and first aid training.
d. Verification of health and accident insurance.

Career Opportunities

Graduates may find employment as pre-school teachers or paraprofessionals in public or private schools, private household childcare workers, self-employed childcare providers, nursery school attendants, or Head Start teachers.

Credit Required for Graduation: Minimum of 73 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	SCT 100	Introduction to Microcomputers	3
_____	EMP 100	Interpersonal Relations and Professional Development	3
	Occupational Courses		
_____	ECE 101	Introductions to Early Childhood Care and Education	5
_____	ECE 103	Human Growth and Development I	5
_____	ECE 105	Health, Safety, and Nutrition	5
_____	ECE 112	Curriculum Development	3
_____	ECE 113	Art for Children	3

(*continued*)

_____	ECE 114	Music and Movement	3
_____	ECE 115	Language Arts and Literature	5
_____	ECE 116	Math and Science	5
_____	ECE 121	Early Childhood Care and Education Practicum I	3
	-or-		
_____	Program Elective		(3)
_____	ECE 122	Early Childhood Care and Education Practicum II	3
	-or-		
_____	Program Elective		(3)
_____	ECE 202	Social Issues and Family Involvement	5
_____	ECE 224	Early Childhood Care and Education Internship	12

Occupational Elective Courses

_____	ECE 132	Infant/Toddler Development	5
_____	ECE 134	Infant/Toddler Group Care	5

Electronics Technology

The Electronics Technology diploma program is a sequence of courses that 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. Program graduates receive an Electronics Technology diploma which qualifies them as electronics technicians with a specialization in computer electronics, general electronics, industrial electronics, or telecommunications electronics.

Career Opportunities
Graduates may find employment as a specialized industrial or specialized general electronics technician, assembler, tester, repairer, and calibrator.

Credit Required for Graduation: Minimum of 92 credit hours

	Program Courses		**Credits**
	General Core Courses (All specializations)		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 101	English	5
_____	MAT 103	Algebraic Concepts	5
_____	MAT 105	Trigonometry	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses (All specializations)		
_____	ELC 104	Soldering Technology	2
_____	ELC 108	Direct Current Circuits II	4
_____	ELC 110	Alternating Current Circuits II	4
_____	ELC 115	Solid State Devices II	4
_____	ELC 117	Linear Integrated Circuits	4
_____	ELC 118	Digital Electronics I	4
_____	ELC 119	Digital Electronics II	4
_____	ELC 120	Microprocessors Fundamentals	4
_____	IFC 100	Industrial Safety Procedures	2
_____	IFC 101	Direct Current Circuits I	4
_____	IFC 102	Alternating Current I	4
_____	IFC 103	Solid State Devices I	4
	Specific Occupational Courses (Computer Electronics Technology Specialist)		
_____	ELC 217	Computer Hardware	7

(*continued*)

_____	ELC 218	Operating Systems Technologies	7
_____	ELC 219	Networking I	4
_____	ELC 286	CompTIA A+ Certification Prep	7
_____	Technically Related Electives		2

Specific Occupational Courses (General Electronics Technology Specialist)

_____	ELC 123	Communication Electronics Survey	7
_____	ELC 124	Industrial Electronics	4
_____	Technically Related Electives		14

Specific Occupational Courses (Industrial Electronics Technology Specialist)

_____	ELC 211	Process Controls	6
_____	ELC 212	Motor Controls	6
_____	ELC 213	Programmable Controllers	5
_____	ELC 214	Mechanical Devices	3
_____	ELC 215	Fluid Power	3
_____	ELC 216	Robotics	2

Specific Occupational Courses (Telecommunications Electronics Technology Specialist)

_____	ELC 217	Computer Hardware	7
_____	ELC 219	Networking I	4
_____	ELC 259	Fiber Optic Systems	4
_____	ELC 260	Telecommunication and Data Cabling	4
_____	ELC 261	Telecommunication Systems Installation and Programming	3
_____	ELC 262	Telecommunications and Data Transmission Concepts	3

Industrial Electrical Technology

The Industrial Electrical Technology program is a sequence of courses designed to prepare students for careers in industry. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of theory and practical application necessary for successful employment. Program graduates receive an Industrial Electrical Technology diploma.

Career Opportunities

Graduates may find employment with a number of firms both small and large. Local residential/commercial electrical contractors as well as larger manufacturing businesses or industries will continue to have a need for individuals with basic skills in electricity. Program graduates have the qualifications of an entry level industrial electrician.

Credit Required for Graduation: Minimum of 89 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 101	English	5
_____	MAT 103	Algebraic Concepts	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	ELT 106	Electrical Prints, Schematics, and Symbols	4
_____	ELT 107	Commercial Wiring I	5
_____	ELT 108	Commercial Wiring II	5
_____	ELT 109	Commercial Wiring III	5
_____	ELT 111	Single-Phase and Three-Phase Motors	5
_____	ELT 112	Variable Speed/Low Voltage Controls	3
_____	ELT 116	Transformers	4
_____	ELT 117	National Electrical Code Industrial Applications	4
_____	ELT 118	Electrical Controls	5
_____	ELT 119	Electricity Principles II	4
_____	ELT 120	Residential Wiring I	5
_____	ELT 121	Residential Wiring II	6
_____	ELT 122	Industrial PLCs	6
_____	IFC 100	Industrial Safety Procedures	2

(*continued*)

_____	IFC 101	Direct Current Circuits I	4

Occupational Elective Courses (5 credits from the list below)

_____	ACT 100	Refrigeration Fundamentals	4
_____	ELT 115	Diagnostic Troubleshooting	3
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5
_____	MCH 101	Introduction to Machine Tool	6
_____	WLD 133	Metal Welding and Cutting Techniques	3

Machine Tool Technology

The Machine Tool Technology program is a sequence of courses that prepares students for careers in the machine tool technology field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of machine tool theory and practical application necessary for successful employment. Program graduates receive a Machine Tool Technology diploma and are qualified as machine tool technicians.

Career Opportunities

Graduates may find employment as machinists, machine tool operators, tool and die makers, and machine tool apprentices.

Credit Required for Graduation: Minimum of 85 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	MCH 101	Introduction to Machine Tool	6
_____	MCH 102	Blueprint Reading I	5
_____	MCH 104	Machine Tool Math I	5
	-or-		
_____	MAT 103	Algebraic Concepts	(5)
_____	MCH 105	Machine Tool Math II	5
_____	MCH 107	Characteristics of Metals/Heat Treatment	4
_____	MCH 109	Lathe Operations I	6
_____	MCH 110	Lathe Operations II	6
_____	MCH 112	Surface Grinder Operations	3
_____	MCH 114	Blueprint Reading II	5
_____	MCH 115	Mill Operations I	6
_____	MCH 116	Mill Operations II	6
_____	MCA 211	CNC Fundamentals	7
	Occupational Elective Courses (5 credits from the list below)		
_____	MCH 103	Applied Measurement	5

(*continued*)

_____	MCH 151	Machine Tool Technology - Internship	5
_____	WLD 100	Introduction to Welding Technology	6

Marketing Management

The Marketing Management program is designed to prepare students for employment in a variety of positions in today's marketing and management fields. The Marketing Management 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 marketing management. Graduates of the program receive a Marketing Management diploma in marketing administration.

Career Opportunities

Graduates may find employment as Display Managers, Buyers, Advertising Managers, Retail Store Managers, Tellers, Apparel Trimmings Sales Representatives, Fashion Accessories Salesperson, General Merchandise Salesperson, Merchandise Displayer, Department Manager, or many other marketing related jobs. Any of the above employment opportunities may also provide the graduate experience to assist in opening his/her own business.

Credit Required for Graduation: Minimum of 85 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	ENG 111	Business English	5
_____	ENG 112	Business Communications	5
_____	MAT 111	Business Math	5
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	MKT 100	Introduction to Marketing	5
_____	MKT 101	Principles of Management	5
_____	MKT 103	Business Law	5
	-or-		
_____	ACC 155	Legal Environment of Business	(5)
_____	MKT 104	Principles of Economics	5
_____	MKT 106	Fundamentals of Selling	5
	Specific Occupational Courses (Marketing Administration Specialization)		
_____	ACC 101	Principles of Accounting I	6
_____	MKT 108	Advertising	4
_____	MKT 109	Visual Merchandising	4
	-or-		
_____	MKT 232	Advanced Selling	(4)
_____	MKT 110	Entrepreneurship	8

(*continued*)

_____	MKT 122	Buying & Merchandise Management	5
	-or-		
_____	MKT 228	Advanced Marketing	(5)
_____	MKT 130	Marketing Administrations O.B.I. I	3
_____	MKT 131	Marketing Administration O.B.I. II	3

Occupational Elective Courses (6 credits from the list below)

_____	ACC 102	Accounting	6
_____	ACC 103	Principles of Accounting	6
_____	ACC 104	Computerized Accounting	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 103	Advanced Document Processing	5
_____	BUS 105	Data Base Fundamentals	5
_____	BUS 106	Office Procedures	5
_____	BUS 108	Word Processing	7
_____	BUS 202	Spreadsheet Fundamentals	3
_____	CIS 103	Operating Systems Concepts	6
_____	MKT 123	Small Business Management	5

Medical Assisting

This program is designed to prepare students for employment in a variety of positions in today's medical offices. Medical Assisting students benefit from a challenging and varied program that combines instruction through traditional classroom courses, and "real world" experiences through on the job externships in physicians' offices. Business courses as well as medical courses are included in the program to ensure that students receive training in all aspects of the physician's office. Instruction is provided in typing, accounting, filing, insurance preparation, medical terminology, anatomy, pharmacology, lab techniques, venipuncture, EKG, CPR, injections, vital signs, and special techniques for assisting the physician. Program graduates receive a diploma. Graduates electing to take the certification exam may do so through the American Association of Medical Assistants.

The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE).

NOTE: According to the American Association of Medical Assistants (AAMA), a person may be denied the opportunity to take the certification examination and/or may be denied certification to practice Medical Assisting if the person has been convicted of a felony or any crime violating federal or state controlled substance laws or other grounds as specified by law.

Career Opportunities

Graduates have many choices for future employment including private physicians' offices, clinics, emergency care facilities, hospitals, and other health care organizations. Positions include medical assistant, transcriptionist, receptionist, insurance clerk, office manager, EKG technician, lab assistant (phlebotomist), and private duty care. The field is presently experiencing rapid expansion, and the trend is expected to continue in the foreseeable future.

Competitive Selection Process

Level I: Medical Assisting Preparatory/Core courses

The annual Level 1 deadline is July 1.

To be eligible for the Medical Assisting program selection, the student must complete the following requirements by the July 1 deadline. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of C – AHS 101, AHS 104, ENG 101, MAT 101, PSY 101, and SCT 100.
- Must complete AHS 109 (Medical Terminology), BUS 101 (Beginning Document Processing), and BUS 106 (Office Procedures) prior to the beginning of the fall quarter to be eligible to progress to the Essential Specific Occupational Courses. The grade earned in these courses will not be included in the Level II competitive Progression Selection.
- Must possess certification in CPR by the CPR for Healthcare Providers Certification (American Heart Association); American Red Cross Health Care Professional or National Health & Safety Institute Professional.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at 770.537.7942.There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.

- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Affairs upon completion of the required courses. Students must also attach a copy of their CPR certification card and a copy of the PSB Health Occupations Aptitude Exam score report.

Level II: Medical Assisting Competitive Selection

The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 75% of the overall score.
- The score on the Psychological Services Bureau Health Occupations Aptitude Exam will comprise 25% of the overall score.
- Students with the highest overall scores will be selected for program admission.

Level III: Medical Assisting Occupational and Clinical Courses

Students selected for admission to the Medical Assisting program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each fall quarter.

Credit Required for Graduation: Minimum of 84 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 104	Introduction to Health Care	3
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	PSY 101	Basic Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 106	Office Procedures	5
_____	MAS 101	Legal Aspects of the Medical Office	2
_____	MAS 103	Pharmacology	5
_____	MAS 108	Medical Assisting Skills I	5
_____	MAS 109	Medical Assisting Skills II	5
_____	MAS 112	Human Diseases	5
_____	MAS 113	Maternal and Child Care	5
_____	MAS 114	Medical Administrative Procedures I	3

(*continued*)

_____	MAS 115	Medical Administrative Procedures II	3
_____	MAS 117	Medical Assisting Externship	8
_____	MAS 118	Medical Assisting Seminar	4

Paramedic Technology

The Paramedic Technology program prepares students for employment in paramedic positions in today's health services field. The Paramedic Technology program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the basic EMT level to retrain as a paramedic. Graduates of the program receive a Paramedic Technology diploma and are eligible to sit for the National Registry Paramedic certification test.

NOTE: *Prospective applicants should note that the tuition and fees for this program are higher than for other programs, totaling $4368.*

Career Opportunities
The Paramedic Technology program prepares students for employment in paramedic positions in today's health services field. Employment of emergency medical technicians and paramedics is expected to grow faster than the average for all occupations through 2010. Population growth and urbanization will increase the demand for full-time paid EMTs and paramedics.

Competitive Selection Process
Level I: Paramedic Technology Preparatory/Core Courses
The annual Level I deadline is February 1.

To be eligible for the Paramedic Technology program selection, the student must meet the following requirements by the February 1 deadline. The student:

- Must complete the West Central student application process and achieve regular status program.
- Must possess National Registry EMT Basic or National Registry EMT Intermediate certification.
- Must be in good academic standing with the College
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must submit a Competitive Progression File Review Request to the Office of Student Affairs and attach documentation of National Registry EMT Basic or Intermediate certification.
- Must complete AHS 101, ENG 101, MAT 101, and SCT 100 with a minimum grade of *C* and the official record of completion received by the Office of Student Affairs by March 31.

Level II: Paramedic Technology Competitive Selection
Due to the unique admissions requirements of the Paramedic Technology program, the number of students completing Level I requirements does not usually exceed the number of seats available in the Level III Occupational and Clinical Courses. Students completing all Level I requirements are eligible for enrollment. However, at any time that there are more students than there are seats available, students will be admitted in the order they complete all Level I requirements. Students not receiving a seat during the current year will be enrolled the following year.

Level III: Paramedic Technology Occupational and Clinical Courses
Students admitted to the Paramedic Technology program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each spring quarter.

Credit Required for Graduation: Minimum of 79 credit hours

	Program Courses		**Credits**
	General Core Courses		
_____	AHS 101	Anatomy and Physiology	5
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	EMS 126	Introduction to the Paramedic Profession	3
_____	EMS 127	Patient Assessment	4
_____	EMS 128	Applied Physiology and Path Physiology	3
_____	EMS 129	Pharmacology	4
_____	EMS 130	Respiratory Function and Management	5
_____	EMS 131	Trauma	5
_____	EMS 132	Cardiology I	5
_____	EMS 133	Cardiology II	4
_____	EMS 134	Medical Emergencies	5
_____	EMS 135	Maternal/Pediatric Emergencies	5
_____	EMS 136	Special Patients	2
_____	EMS 200	Clinical Application of Advanced Emergency Care	11
_____	EMS 201	Summative Evaluations	5

Practical Nursing

The Practical Nursing program is designed to prepare students to take the state board examination for licensing as a practical nurse. The program includes various academic and occupational courses that provide a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to provide competent nursing medical care. Clinical experiences are planned so the theory and hands-on practice are integrated under the guidance of the clinical instructor.

NOTE: A student must complete the entire program sequentially and pass the state board exam to become licensed. According to the Georgia Board of LPN rules, a person may be denied the opportunity to take the licensing examination and/or may be denied a license to practice nursing if the person has been convicted of a felony or any crime violating federal or state controlled substance laws or other grounds as specified by law.
Student travel is required to clinical sites.

Key aptitudes for nursing are a willingness to schedule adequate study time, good sense of humor, positive attitude, good attendance, and an excellent work ethic.

Career Opportunities
Graduates may find employment in hospitals, physician's offices, long term care, rehab, clinics, and HMOs.

Competitive Selection Process
Level I: Practical Nursing Preparatory/Core Courses

Two classes are admitted annually. A separate selection process is completed for each class.

- For the class beginning summer quarter at the Central Education Center (CEC), Coweta Campus, the annual Level I deadline is April 1.
- For the class which begins fall quarter at the Murphy Campus, the annual Level I deadline is July 1.

To be eligible for Practical Nursing program selection, the student must complete the following requirements by the applicable Level I deadline. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of C: AHS 101, AHS 104, AHS 109, ENG 101, MAT 101, PSY 101, and SCT 100.
- Must possess certification in CPR by the American Heart Association/BLS for the Healthcare Provider. American Red Cross Health Care Professional or National Health & Safety Institute Professional certification will also be accepted.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at 770.537.7942. There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.
- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Affairs upon completion of the required courses. Students must also attach a copy of their CPR certification card and a copy of the PSB Health Occupations Aptitude Exam score report.

Level II: Practical Nursing Competitive Selection

The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 75% of the overall score.
- The score on the Psychological Services Bureau Health Occupations Aptitude Exam will comprise 25% of the overall score.
- Students with the highest overall scores will be selected for program admission.

Level III: Practical Nursing Occupational and Clinical Courses

Students selected for admission to the Practical Nursing program will complete the occupational and clinical program courses in a prescribed sequence as a class unit.

Credit Required for Graduation: Minimum of 95 credit hours

	Program Courses		**Credits**
	Courses for Selection Process		
_____	AHS 101	Anatomy Physiology	5
_____	AHS 104	Introduction to Health Care	3
_____	AHS 109	Medical Terminology	3
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	PSY 101	Basic Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	AHS 102	Drug Calculation and Administration	3
_____	AHS 103	Nutrition and Diet Therapy	2
_____	NPT 112	Medical-Surgical Nursing I Practicum	7
_____	NPT 113	Medical-Surgical N ursing II Practicum	7
_____	NPT 213	Obstetrical Nursing Practicum	3
_____	NPT 212	Pediatric Nursing Practicum	2
_____	NPT 215	Nursing Leadership Practicum	2
_____	NSG 110	Nursing Fundamentals	10
_____	NSG 112	Medical-Surgical Nursing I	9
_____	NSG 113	Medical-Surgical Nursing II	9
_____	NSG 213	Obstetrical Nursing	5

(*continued*)

_____	NSG 212	Pediatric Nursing	5
_____	NSG 215	Nursing Leadership	2

NOTE: *Nursing courses must be completed sequentially. Once in occupational courses, the student must maintain 70 or above to continue in the program.*

Surgical Technology

The Surgical Technology diploma program prepares students for employment in a variety of positions in today's surgical technology profession. Students are prepared to function in association with nurses and surgeons to help provide the best possible care of the surgical patient. They gain knowledge and experience with aseptic technique, and preparation and use of instruments and supplies to be used in surgery 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. All textbooks are to be purchased at the beginning of the first quarter of the program. These books will be used during the entire program. Upon completion of the program, students have the option of becoming certified through The National Board of Surgical Technologists and Surgical First Assists.

NOTE: Once students have completed the selection process and have been accepted into the Surgical Technology program, they will be required to purchase all textbooks for the program during their first quarter. (Information regarding costs can be found on the West Central Technical College website.)

Career Opportunities

Surgical technologists are in demand for employment in hospitals, operating rooms, physicians' offices, emergency rooms, ambulatory/day surgery centers, central supply and management roles.

Competitive Selection Process

Level I: Surgical Technology Preparatory/Core courses

The annual Level I deadline is July 1.

The following requirements must be completed by the July 1 deadline to be eligible for the Surgical Technology program selection. The student:

- Must complete the West Central student application process and achieve regular status program admission.
- Must be in good academic standing with the College.
- Must complete the following courses with a minimum grade of C: AHS 101, AHS 104, AHS 109, ENG 101, MAT 101, PSY 101, and SCT 100.
- Must possess certification in CPR by the CPR for Healthcare Providers Certification (American Heart Association); American Red Cross Health Care Professional or National Health & Safety Institute Professional.
- Must complete the Psychological Services Bureau (PSB) Health Occupations Aptitude Exam. Students may schedule a testing date by calling the Continuing Education Department at 770.537.7942. There is a fee for each attempt at taking this exam. Students are allowed to repeat the exam in an effort to improve their score.
- Must submit a Health Services Competitive Selection File Review Request to the Office of Student Affairs up on completion of the required courses and attach a copy of their CPR certification card and a copy of the PSB Health Occupations Aptitude Exam score report.

Level II: Surgical Technology Competitive Selection

The competitive selection is based on the following scoring process:

- The academic performance demonstrated in the required Level I courses will comprise 75% of the overall score.
- The score on the Psychological Services Bureau Health Occupations Aptitude Exam will comprise 25% of the overall score.
- Students with the highest overall scores will be selected for program admission.

Level III: Surgical Technology Occupational and Clinical Courses
Students selected for admission to the Surgical Technology program will complete the occupational and clinical program courses in a prescribed sequence as a class unit. A class is admitted beginning each fall quarter.

Credit Required for Graduation: Minimum of 87 credit hours

	Program Course		**Credits**
	General Core Courses		
_____	ENG 101	English	5
_____	MAT 101	General Mathematics	5
_____	PSY 101	Basic Psychology	5
_____	SCT 100	Introduction to Microcomputers	3
	Occupational Courses		
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 104	Introduction to Health Care	3
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	SUR 101	Introduction to Surgical Technology	6
_____	SUR 102	Principles of Surgical Technology	5
_____	SUR 108	Surgical Microbiology	3
_____	SUR 109	Surgical Patient Care	3
_____	SUR 110	Surgical Pharmacology	3
_____	SUR 112	Introductory Surgical Practicum	7
_____	SUR 203	Surgical Procedures I	6
_____	SUR 204	Surgical Procedures II	6
_____	SUR 213	Specialty Surgical Practicum	8
_____	SUR 214	Advanced Specialty Surgical Practicum	8
_____	SUR 224	Seminar in Surgical Technology	3

Certificate Programs

Air Conditioning Electrical Technician

Air Conditioning Technician Assistant

Automotive
- *Engine Repair Technician*
- *Front End Alignment and Brakes Specialist*
- *Automotive Heating and Air Conditioning Specialist*
- *Tune-Up Specialist*

Basic Machining Operator

CAD Operator Training
- *Architectural*
- *Mechanical*

CNC Specialist

Commercial Truck Driving

Culinary Services
- *Food Production Worker*
- *Prep Cook*

Dental Assisting
- *Basic*
- *Advanced*

Early Childhood Care and Education
- *Child Development Specialist*
- *Infant and Toddler Care Specialist*

Emergency Medical Technician
- *Basic*
- *Intermediate*

Health Care Assistant

Heavy Diesel Service Technician

Law Enforcement Technician

Medical Billing and Coding Specialist

Medical Office Coordinator

Medical Receptionist

Medical Transcriptionist

Microsoft Applications User
- *Excel*
- *Office*
- *Word*

Office Accounting Specialist

Office Management Assistant

Patient Care Assisting

Patient Care Technician

Phlebotomy Technician

Residential Electrical Apprentice

Shampoo Technician

Small Business Marketing Manager

Welding
- *Gas Tungsten Arc Welder*
- *Flat Shielded Metal Arc Welder*
- *Gas Metal Arc Welder Fabricator*
- *Overhead Shielded Metal Arc Welder*

Air Conditioning Electrical Technician

The Air Conditioning Electrical Technician certificate program prepares students in the air conditioning area of study to acquire competencies in electricity related to installation, service, and maintenance of electrical systems. Students may enter day and evening classes at the beginning of any quarter as openings become available.

Career Opportunities
Graduates may find employment as service technician helper, in plant maintenance, or in sales.

Credit Required for Completion: 20 credit hours

	Program Courses		Credits
_____	ACT 103	Electrical Fundamentals	7
_____	ACT 104	Electric Motors	4
_____	ACT 105	Electrical Components	5
_____	ACT 106	Electrical Control Systems and Installation	4

Air Conditioning Technician Assistant

The Air Conditioning Technician Assistant certificate of credit is a series of courses that prepares a student to become an Air Conditioning Technician Assistant. Students may enter day and evening classes at the beginning of any quarter as openings become available.

Career Opportunities
Graduates may find employment as service technician helper, in plant maintenance, or in sales.

Credit Required for Completion: 18 credit hours

	Program Courses		Credits
_____	ACT 100	Refrigeration Fundamentals	4
_____	ACT 101	Principles and Practices of Refrigeration	7
_____	ACT 102	Refrigeration Systems Components	7

Automotive Engine Repair Technician

The Automotive Engine Repair Technician program is a sequence of courses that prepares students for careers in the automotive and related industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes the core interpersonal and technical skills required to work in the automotive field. Program graduates will receive an Automotive Engine Repair Technician Certificate.

Career Opportunities
Graduates may find entry-level employment as technician apprentices or technician's helpers with automotive repair and maintenance shops, automobile dealers, or retailers and wholesalers of automotive parts, accessories, and supplies.

Credit Required for Completion: 19 credit hours

	Program Courses		Credits
_____	AUT 120	Introduction to Automotive Technology	3
_____	AUT 122	Electrical and Electrical Systems	6
_____	AUT 124	Battery, Starting, and Charging Systems	4
_____	AUT 126	Engine Principles of Operation and Repair	6

Automotive Front End Alignment and Brakes Specialist

The Automotive Front End and Brakes Specialist certificate prepares students for entry level positions in the specialty areas of automotive suspension and brake repair. Students are trained in basic brake and suspension systems, advanced anti-lock brake systems, and four wheel alignments. Students are also trained in customer and employee relations.

Career Opportunities
Graduates may find employment as automotive brake and front end technician apprentices, technician's helpers, general brake service technicians, and suspension and brake maintenance technicians.

Credit Required for Completion: 25 credit hours

	Program Courses		Credits
_____	AUT 120	Introduction to Automotive Technology	3
_____	AUT 122	Electrical and Electrical Systems	6
_____	AUT 130	Brake Systems	4
_____	AUT 132	Suspension and Steering Systems	4
_____	AUT 214	Adv. Electronic Controlled Brake System Diagnosis	4
_____	AUT 216	Adv. Electronic Controlled Suspension & Steering Syst.	4

Automotive Heating and Air Conditioning Specialist

The Automotive Air Conditioning Specialist program is designed to meet specific training needs of the automotive industry. The student will become proficient in the specialized area of automotive air conditioning repair, which is common to almost all of today's vehicles. At the same time, the student will enhance overall employability within the automotive profession.

Career Opportunities
Graduates may be employed as an automotive air conditioning service technician.

Credit Required for Completion: 15 credit hours

	Program Courses		Credits
_____	AUT 120	Introduction to Automotive Technology	3
_____	AUT 122	Electrical and Electronic Systems	6
_____	AUT 142	Climate Control Systems	6

Tune Up Specialist

The Tune Up Specialist certificate prepares students for entry level positions in the specialty areas of automotive tune up. Students are trained in basic ignition and engine systems, advanced fuel injection systems, and emissions control systems. Students are also trained in customer and employee relations.

Career Opportunities
Graduates may find employment as automotive tune up technician apprentices, technician's helpers, general tune up service technicians, and vehicle maintenance technicians.

Credit Required for Completion: 33 credit hours

	Program Courses		Credits
_____	AUT 120	Introduction to Automotive Technology	3
_____	AUT 122	Introduction to Automotive Electrical	6
_____	AUT 126	Engine Principles of Operation and Repair	6
_____	AUT 128	Fuel, Ignition and Emission Systems	7
_____	AUT 140	Electronic Engine Control Systems	7
_____	AUT 218	Advanced Electronic Engine Control Systems	4

Basic Machining Operator

The Basic Machining certificate program provides basic training in safe operation and set-up of general machine shop equipment. The training is designed for those students who need to receive training as quickly as possible in order to prepare for employment. This program provides instruction in drill press, horizontal and vertical band saw, pedestal grinder, lathe, vertical milling machine, horizontal surface grinder, and cylindrical grinder operations.

Career Opportunities
Program completers are qualified for entry-level employment as machine operators.

Credit Required for Completion: 35 credit hours

	Program Courses		Credits
_____	MCH 101	Introduction to Machine Tool	6
_____	MCH 102	Blueprint Reading For Machine Tool	5
_____	MCH 104	Machine Tool Math I	5
_____	MCH 109	Lathe Operations I	6
_____	MCH 112	Surface Grinder Operations	3
_____	MCH 115	Mill Operations I	6
_____	Elective *(4 credits from the list below)*		4
	Elective Courses		
_____	DDF 100	Drafting Fundamentals	6
_____	MCH 103	Applied Measurement	5
_____	WLD 100	Introduction to Welding Technology	6

CAD Operator Training—Architectural

The purpose of this program is to introduce the architectural drawing skills necessary to produce a complete set of construction drawings giving basic floor plan information. The program emphasizes a combination of computer aided drafting (CAD) theory and practical applications necessary for successful employment. West Central uses AutoCAD software for the drafting projects included in this program. Topics include floor, footing, foundation, mechanical and electrical plans; interior and exterior elevations; sections and details, site plans; and specifications.

Career Opportunities
Graduates may find employment as a specialized CAD operator, such as an architectural drafter, or detailer for construction companies.

Credit Required for Completion: 28 credit hours
Enrollment into the program is accepted on a quarterly basis, space permitting.

	Program Courses		Credits
_____	DDF 100	Drafting Fundamentals	5
_____	DDF 102	Size and Shape Description I	5
_____	DDF 103	Size and Shape Description II	5
_____	DDS 205	Residential Architectural Drawing I	6
_____	DDS 208	Residential Architectural Drawing II	6

CAD Operator Training—Mechanical

The CAD Operator Training program is a sequence of courses that prepares students for careers in the field of mechanical drafting. The program emphasizes a combination of computer aided drafting (CAD) theory and practical application necessary for successful employment. West Central uses AutoCAD and Inventor software for the drafting projects included in this program. Students completing the program generally find employment in the field of CAD operation or a related field.

Career Opportunities
Graduates may find employment as a specialized CAD operator in a manufacturing environment or a related drafting position such as land surveyor, mechanical drafter, or detailer for construction companies.

Credit Required for Completion: 33 credit hours
Enrollment into the program is accepted on a quarterly basis, space permitting.

	Program Courses		Credits
_____	DDF 100	Drafting Fundamentals	5
_____	DDF 102	Size and Shape Description I	5
_____	DDF 103	Size and Shape Description II	5
_____	DDF 105	Auxiliary Views	3
_____	DDF 106	Fasteners	3
_____	DDF 109	Assembly Drawings I	5
_____	DDF 112	3D Drawing and Modeling	6

CNC Specialist

The CNC Specialist certificate program is a sequence of courses that prepares students for careers in the Computer Numerical Control Machining field. Learning opportunities develop academic, technical, and professional knowledge for job acquisition, retention and advancement. The program emphasizes a combination of CNC theory and practical application necessary for successful employment and advancement.

Career Opportunities
Graduates may find employment in positions requiring expertise with basic machining knowledge and skills with a specialization in CNC.

Credit Required for Completion: 39 credit hours

	Program Courses		Credits
_____	MCA 211	CNC Fundamentals	7
_____	MCA 213	CNC Mill Manual	7
_____	MCA 215	CNC Lathe Manual Programming	7

(*continued*)

_____	MCA 217	CNC Practical Applications	6
_____	MCA 219	CAD / CAM Programming	7
_____	Elective *(5 credits from list below)*		5

Elective Courses

_____	DDF 100	Drafting Fundamentals	6
_____	MCH 103	Applied Measurement	5
_____	WLD 100	Introduction to Welding Technology	6

Commercial Truck Driving

This program is designed to address the need for drivers in the trucking industry. It provides basic training in the principles and skills of commercial truck operations. The Commercial Truck Driving program provides a course of study that covers the knowledge and skills required to operate a tractor and trailer safely and properly. The program emphasizes a combination of commercial truck driving theory and practical application necessary for successful employment as an entry level driver.

NOTE: Applicants must be 18 years of age by program admission date. After ASSET/COMPASS scores (and learning support scores if needed) are complete, students should have all the necessary paper work completed and ready to turn in on the first day of class. The Federal Motor Carriers Safety Administration (FMCSA) regulates commercial driver licensing and requires a Department of Transportation (DOT) physical and drug test prior to the issuance of a commercial driver's license (CDL) or learner permit. Students must have a learner permit to begin the on-road driving component of this program. Prior to enrolling in the first class, students must provide documentation of having passed a DOT long-form physical examination within 30 days of the anticipated date of enrollment in the program and a NIDA 5 Drug Screen within 30 days of the first day of class. FMCSA regulations also stipulate that students must complete random drug tests while enrolled in this program. Students are responsible for the cost of all drug screenings.

A 7-year Motor Vehicle Report (MVR) is also required prior to enrollment. Applicants should note that the required MVR must contain no more than eight current points, no more than five points in a previous single year, and no more than four moving violations on the Georgia Violator Scale. Applicants cannot have any DUI, open container, or controlled substance or drug violations within the past five years of the anticipated date of enrollment in the program. Applicants are responsible for the cost of the MVR.

The day program is completed in 10 weeks, and the classes are held 5 days a week. Day classes will have 4 sessions scheduled for night driving. The evening program is completed in 12 weeks, and classes are held 4 evenings per week. West Central offers 6 day and 3 evening programs each year. *Prospective applicants should note that the tuition and fees for this program are higher than for other programs, totaling $2243.00.*

Career Opportunities
Students who complete the program may seek employment as Commercial Truck Drivers or related employment. Applicants must be 18 years of age for employment as an intrastate driver and 21 years of age for employment as an interstate driver. Program graduates who are under the age of 21 may drive a commercial truck only in Georgia; therefore, employment opportunities may be limited until graduates reach the age of 21.

Credit Required for Completion: 15 credit hours

	Program Courses		Credits
_____	CTD 101	Fundamentals of Commercial Truck Driving	5
_____	CTD 102	Basic Operation	5
_____	CTD 103	Advanced Operation	5
	-or-		
_____	CTD 104	Internship	(5)

Culinary Services—Food Production Worker I

The Food Production Worker I technical certificate of credit is designed to provide basic entry-level skills for employment in the food service industry as prep cooks and banquet/service prep workers. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of culinary theory and practical application necessary for successful employment.

Career Opportunities
Graduates will be prepared to pursue diverse opportunities in the culinary field having gained basic entry-level skills for employment in the food service industry as prep cooks and banquet/service prep workers.

Credit Required for Completion: 20 credit hours

	Program Courses		Credits
_____	CUL 100	Professionalism in Culinary Arts	3
_____	CUL 110	Food Service Sanitation and Safety	3
_____	CUL 112	Principles of Cooking	5
_____	CUL 114	American Regional Cuisine	5
_____	CUL 127	Banquet Preparation and Presentation	4

Culinary Services—Prep Cook

The Prep Cook 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. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of culinary theory and practical application necessary for successful employment.

Career Opportunities
Graduates will be prepared to pursue diverse opportunities in the culinary field having gained basic entry-level skills for entry into the food services preparation area as a prep cook.

Credit Required for Completion: 22 credit hours

	Program Courses		Credits
_____	CUL 100	Professionalism in Culinary Arts	3
_____	CUL 110	Food Service Sanitation and Safety	3
_____	CUL 112	Principles of Cooking	5
_____	CUL 114	American Regional Cuisine	5
_____	CUL 116	Food Service Purchasing and Control	3
_____	CUL xxx	Elective	3

Dental Assisting—Basic

The Basic Dental Assisting certificate provides the student with the knowledge, skills and techniques to meet entry-level occupational needs of the dental community. The student must complete a minimum of 270 clock hours of didactic/laboratory/clinical courses in dental assisting. Classes are conducted in Newnan at the Central Educational Center.

Career Opportunities
Graduates may be employed as chair side assistants in general dentistry and pediatric dentistry. Other career opportunities include: infection control coordinators and dental hygiene assistants. Graduates of the Advanced Dental Assisting Certificate may be invited to participate in the Georgia Dental Association's Expanded Duties Certificate Courses based on academic performances.

Credit Required for Completion: 17 credit hours

	Program Courses		Credits
_____	AHS 104	Introduction to Health Care	3
_____	DEN 106	Oral Anatomy	5
_____	DEN 134	Dental Assisting I	7
_____	DEN 146	Dental Practicum I	2

Dental Assisting—Advanced

The Advanced Dental Assisting certificate provides the student with the knowledge, skills and techniques to meet the occupational needs of the dental community. The student must complete a minimum of 290 clock hours of didactic/laboratory/clinical courses in dental assisting. Classes are conducted in Newnan at the Central Educational Center.

Career Opportunities
Graduates may be employed as chair side assistants in general dentistry, pediatric dentistry, orthodontics, endodontics, oral surgery, periodontics, and prosthodontics. Other career opportunities include insurance coordinators, infection control coordinators, appointment control coordinators, dental office assistants, and dental hygiene assistants.

Credit Required for Completion: 21 credit hours

	Program Courses		Credits
_____	DEN 102	Head and Neck Anatomy	2
_____	DEN 135	Dental Assisting II	7
_____	DEN 139	Dental Radiology	5
_____	DEN 140	Dental Practice Management	5
_____	DEN 147	Dental Practicum II	2

ECCE—Child Development Specialist

The purpose of Child Development Specialist certificate is to provide the necessary skills for entry-level employment as a Child Development Associate. Skill areas include planning a safe and healthy learning environment, steps to advance children's physical and intellectual development, positive ways to support children's social and emotional development; strategies to establish productive relationships with families, strategies to manage an effective program operation, professionalism; observing and recording children's behavior, and principles of child growth and development.

NOTE: Prior to enrolling in a practicum, students must provide the following documentation:

a. Satisfactory criminal record check; (Georgia law prohibits the placement of persons with criminal records in childcare facilities. Anyone convicted of felony offenses, neglecting or abusing a dependent person, sexual offenses, or any other "covered crime" cannot work in childcare facilities. Students affected by this law, or who think they might be, should discuss their situations immediately with their advisors. Because their employment options may be severely limited in the early childhood profession, applicants who receive unsatisfactory criminal records checks are discouraged from pursuing the Early Childhood Care and Education programs of study and may need to consider other options.)
b. Verification of liability insurance;
c. Basic cardiac life support and first aid training; and
d. Verification of health and accident insurance

Career Opportunities
Graduates may find employment as preschool teachers in public and private childcare facilities, private household childcare workers, self-employed childcare providers, or nursery school attendants.

Credit Required for Completion: 21 credit hours

	Program Courses		Credits
_____	ECE 101	Introduction to Early Childhood Care and Education	5
_____	ECE 103	Human Growth and Development I	5

	(*continued*)		
_____	ECE 105	Health, Safety, and Nutrition	5
_____	ECE 112	Curriculum Development	3
_____	ECE 121	ECCE Practicum I	3
	-or-		
_____	EMP 100	Interpersonal Relations and Professional Development	(3)

ECCE—Infant and Toddler Care Specialist

The purpose of this Technical Certificate is to provide a solid Early Childhood Care and Education foundation of knowledge, skills, attitudes and techniques that will improve the quality of Care for Georgia's infants and toddlers.

Career Opportunities
Graduates may find employment as pre-school teachers in public and private childcare facilities, private household childcare workers, self-employed childcare providers, or nursery school attendants.

Credit Required for Completion: 25 credit hours

	Program Courses		**Credits**
_____	ECE 101	Introduction to Early childhood Care and Education	5
_____	ECE 103	Human Growth and Development I	5
_____	ECE 105	Health, Safety, and Nutrition	5
_____	ECE 132	Infant/Toddler Development	5
_____	ECE 134	Infant/Toddler Group Care	5

Emergency Medical Technician—Basic

The Basic EMT certification level has been reintroduced by the State Office of EMS to address primarily the needs of fire departments to meet NFPA requirements for the training of firefighters. This certification does not allow for employment on an ambulance. It is considered an EMT-nontransport level.

NOTE: The Basic EMT curriculum is the U.S. Department of Transportation 1994 National Standard Curriculum for Training Basic EMT. Students who successfully complete the program courses will be eligible to take the National Registry Basic EMT Examination and receive certification at the basic level.

The Basic EMT technical certificate is offered either as a freestanding program for firefighters, etc., or as the first five courses in the eight-course sequence required for the EMT-Intermediate technical certificate.

Upon completion of the Basic EMT program, a graduate will have three options:

1. Graduate as a Basic EMT and take the National Registry Emergency Medical Technicians (NREMT) Basic certification examination.
2. Successfully complete the Basic EMT-level courses, take the NREMT Basic certification examination, and continue in the EMT-Intermediate course.
3. Apply for admission to a Paramedic Technology program. The current National Standard admissions policy allows certified Basic EMTs to be accepted into the Paramedic Technology program.

Career Opportunities

Graduates may find employment with ambulance services, fire departments, volunteer rescue squads or with companies that are training designated employees to provide emergency care.

Credit Required for Completion: 15 credit hours

	Program Courses		**Credits**
_____	EMC 100	Introduction to the EMT Profession	3
_____	EMC 103	Patient Assessment and Airway for the EMT	3
_____	EMC 105	Medical/Behavioral & OB/Peds Emergencies for the EMT	4
_____	EMC 108	Trauma Emergencies for the EMT	2
_____	EMC 110	Summative Evaluations for the EMT-Basic	3

Emergency Medical Technician—Intermediate

The EMT-Intermediate program is designed to provide additional training and increased knowledge and skills in specific aspects of advanced life support above the basic level. The program curriculum is the U.S. Department of Transportation 1985 National Standard Curriculum for The Training of the EMT-Intermediate, along with certain Georgia-specific modules added.

NOTE: To be eligible to meet the requirements for the EMT-Intermediate certification, a person must successfully complete all of the Basic courses (EMC 100, EMC 103, EMC 105, EMC 108, EMC 110), receive NREMT Basic EMT certification, and successfully complete EMC 113, EMC 116, and EMC 119 (or) have a current and valid NREMT Basic certification from another state and successfully complete EMC 113, EMC 116, and EMC 119.
An NREMT-certified Basic EMT can apply for advanced placement in the EMT-Intermediate TCC program and receive credit for EMC 113, EMC 116, and EMC 119 or may apply for application to the Paramedic Technology diploma program.

A graduate of the EMT-Intermediate program is eligible to take the National Registry Emergency Medical Technicians (NREMT) EMT-Intermediate certification examination and work on an ambulance in Georgia. The EMT-Intermediate may also apply for admission to the Paramedic Technology diploma program.

Career Opportunities

Graduates may find employment with ambulance services, fire departments, volunteer rescue squads or with companies that are training designated employees to provide emergency care.

Credit Required for Completion: 24 credit hours

	Program Courses		Credits
_____	EMC 113	Pharmacology and Shock/Trauma Mgmt. for the EMT	3
_____	EMC 116	Medical Emergencies for the EMT-Intermediate	3
_____	EMC 119	Summative Evaluation for the EMT-Intermediate	3

Health Care Assistant

The purpose of the Health Care Assistant certificate is to prepare graduates to enter the workforce in a variety of health careers, including phlebotomy, medical transcription, medical coding, medical receptionist, and patient care assistant (nurse assistant). The concentrations offered build upon a common core of general education and health courses. Students also have the option to complete more than one concentration in order to compete for positions with employers who are seeking multi-skilled health care assistants.

Career Opportunities

Depending on the academic concentration chosen, the certificate program prepares graduates for employment in a variety of positions in medical facilities and offices. Phlebotomists collect blood samples for a range of medical tests. Medical transcriptionists, also called medical transcribers and medical stenographers, listen to dictated recordings made by physicians and other healthcare professionals and transcribe them into medical reports, correspondence, and other administrative material. Medical record coders review information in a patient's medical chart and assign a code to each diagnosis and procedure using a software program. These codes are then used for medical information purposes and to determine the amount a hospital or physician will be reimbursed for the services provided to patients. Medical receptionists coordinate the clerical and communication functions of a patient-care unit in hospitals and health care facilities. Patient Care Assistants (PCA) work with patients in many different health care settings and assist patients with activities of daily living.

Credit Required for Completion: 41-54 total credit hours, depending on specialization

Students admitted to HCA for degree level programs will take upper level core classes numbered 190 and above.

	Program Courses		Credits
	General Core Courses		
_____	ENG 101	English	5
	-or-		
_____	ENG 191	Composition and Rhetoric	5
_____	MAT 101	General Mathematics	5
	-or-		
_____	MAT 190	Mathematical Modeling	5
	-or-		
_____	MAT 191	College Algebra	5
_____	PSY 101	Basic Psychology	5
	-or-		
_____	PSY 191	Introductory Psychology	5

(*continued*)

Health Core Courses

_____	AHS 101	Anatomy and Physiology	5
	-or-		
_____	BIO 193	Anatomy & Physiology I	5
	-and-		
_____	BIO 194	Anatomy & Physiology II	5
_____	AHS 104	Introduction to Health Care	3
_____	AHS 109	Medical Terminology	3
_____	SCT 100	Introduction to Microcomputers	3

Select one of the specializations listed below

Medical Transcription Specialization

_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 213	Medical Document Processing/Transcription	5
_____	ENG 111	Business English	5

Medical Receptionist Specialization

_____	BUS 101	Beginning Document Processing	5
_____	BUS 106	Office Procedures	5
_____	MAS 114	Medical Administrative Procedure I	3
_____	MAS 115	Medical Administrative Procedures I	3

Medical Coding Specialization

_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 216	Medical Office Procedures	5
_____	BUS 226	Medical Office Coding, Billing & Insurance	5

Patient Care Assisting Specialization

_____	AHS 103	Nutrition / Diet Therapy	2
_____	CNA 100	Patient Care Fundamentals	8
_____	EMP 100	Interpersonal Relations	3

Phlebotomy Technician Specialization

_____	PHL 103	Introduction to Venipuncture	4
_____	PHL 105	Clinical Practice	8

Heavy Diesel Service Technician

This program provides training in the theory, diagnosis, and repair of basic systems on diesel engines and diesel equipment. Program instruction includes shop safety, shop equipment, diesel engines, diesel fuel systems, electrical and electronic systems, powertrains, and hydraulics.

NOTE: Employers in this field look for applicants who have mechanical aptitude and strong problem-solving skills Technicians constantly receive updated technical manuals and instructions outlining changes in techniques and standards for repair. It is essential that technicians be able to read, interpret, and comprehend service manuals in order to keep abreast of engineering changes.

Career Opportunities
Successful completion of this program will prepare the student for entering industry as an entry level diesel service technician.

Credit Required for Completion: 50 credit hours

	Program Courses		**Credits**
_____	DET 120	Diesel Equipment Technology – Internship	6
_____	DET 121	Overview of Diesel Technology, Tools, and Safety	5
_____	DET 125	Electrical/Electronic Systems	6
_____	DET 127	Starting and Charging Systems	5
_____	DET 129	Hydraulic Systems I	2
_____	DET 131	Electronic Controls & Accessory Systems	6
_____	DET 132	Diesel Engine Overhaul & Servicing I	4
_____	DET 135	Diesel Engine Fuel Systems, Tune-up & Performance	4
_____	DET 230	Hydraulic Systems II	4
_____	DET 233	Heavy Equipment Power Train Systems I	4
_____	DET 234	Heavy Equipment Power Train Systems II	4
	-or-		
_____	DET 231	Hydraulic Systems III	4

Law Enforcement Technician

The Law Enforcement Technician Certificate program is a sequence of courses that prepare students for a career in Criminal Justice. Learning opportunities develop academic, professional, and occupational knowledge and skills required for job acquisition and advancement in the Criminal Justice field. This program examines the emergence, progress, and problems of the Criminal Justice system in the United States, and the principles of organization, administration and the duties of local and state law enforcement agencies with emphasis on police departments. It provides an overview of all phases of the American correctional system and practices, and introduces the substantive law of major crimes against persons and property.

NOTE: Prospective students need to know that they will be required to meet all applicable employment requirements, including satisfactory background and criminal checks, in order to quality for some internships and to gain employment in most law enforcement settings.

Career Opportunities
Program graduates qualify for employment that can lead to on-the-job training for certification as peace officers and may pursue positions with state, local, or federal agencies.

Credit Required for Completion: 20 credit hours

	Program Courses		Credits
_____	CRJ 101	Introduction to Criminal Justice	5
_____	CRJ 103	Corrections	5
_____	CRJ 104	Principles of Law Enforcement	5
_____	CRJ 105	Introduction to Criminal Procedure	5

Medical Billing and Coding Specialist

The Medical Billing and Coding Specialist program is a series of challenging and practical courses that prepares students for employment in medical offices, hospitals, health insurance companies, or independent billing centers. The program provides learning opportunities to develop skills to assist providers in maximizing their reimbursement through proper ICD-9, CPT, and HCPCS coding and documentation. Pursuing this certification also provides students with an excellent opportunity for continuing further studies in other medical diploma programs.

Career Opportunities
Graduates may find career opportunities as a Billing and Coding Specialist in provider's offices, hospitals, health insurance companies, home health agencies, and independent billing centers.

Credit Required for Completion: 33 credit hours

	Program Courses		Credits
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 216	Medical Office Procedures	5
_____	BUS 226	Medical Office Coding, Billing, and Insurance	5
_____	ENG 101	English	5

Medical Office Coordinator

The Medical Office Coordinator program prepares students for employment in medical offices for administrative and managerial positions. The program provides learning opportunities which introduce, develop, and reinforce the skills and knowledge necessary for job acquisition, retention, and advancement in today's medical offices. The program emphasizes the many facets of the medical office environment, such as basic psychology, anatomy, medical terminology, word processing, and medical office procedures, including HIPPA guidelines, fraud, and reimbursement issues. Pursuing this certification also provides students with an excellent opportunity for continuing further studies in other medical diploma and degree programs.

Career Opportunities

Graduates may find career opportunities as a Medical Office Coordinator in provider's offices, hospitals, health insurance companies, home health agencies, nursing homes, and health clinics.

Credit Required for Completion: 39 credit hours

	Program Courses		**Credits**
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 104	Introduction to Healthcare	3
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 216	Medical Office Procedures	5
_____	ENG 101	English	5
_____	PSY 101	Basic Psychology	5
_____	SCT 100	Introduction to Microcomputers	3

Medical Receptionist

The Medical Transcription program is a sequence of courses that prepares students for careers in the medical transcription field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes skills, such as business English, anatomy, medical word building and word processing, which are necessary for successful employment.

Career Opportunities

Graduates may find employment opportunities as transcriptionists in hospitals, nursing homes, health maintenance organizations (HMOs), private or public health clinics, physician's offices, and home health agencies.

Credit Required for Completion: 28 credit hours

	Program Courses		Credits
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 213	Medical Document Processing/Transcription	5
_____	ENG 111	Business English	5

Medical Transcriptionist

The Medical Transcription program is a sequence of courses that prepares students for careers in the medical transcription field. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes skills, such as business English, anatomy, medical word building and word processing, which are necessary for successful employment.

Career Opportunities

Graduates may find employment opportunities as transcriptionists in hospitals, nursing homes, health maintenance organizations (HMOs), private or public health clinics, physician's offices, and home health agencies.

Credit Required for Completion: 28 credit hours

	Program Courses		Credits
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	BUS 101	Beginning Document Processing	5
_____	BUS 102	Intermediate Document Processing	5
_____	BUS 213	Medical Document Processing/Transcription	5
_____	ENG 111	Business English	5

Microsoft Excel Applications User

The certificate program prepares students to be end users of Microsoft Excel. The program emphasizes Microsoft Excel operations necessary for successful employment. It provides short-term training for students desiring to progress in their occupation.

Career Opportunities
Graduates may find employment in office settings as executive or administrative secretaries. The MOS certification promotes marketability of the graduate.

Credit Required for Completion: 16 credit hours

	Program Courses		Credits
_____	SCT 100	Introduction to Microcomputers	5
_____	MAT 111	Business Math	5
_____	BUS 202	Spreadsheet Fundamentals	3
_____	Elective		5

Microsoft Office Applications User

The certificate program prepares students to be end users on microcomputer systems. The program emphasizes keyboarding and software operations necessary for successful employment. It provides short-term training for students desiring to progress in their occupation.

Career Opportunities
Students who complete the program may seek employment as secretaries with business offices, banks, retailers and wholesalers, and various governmental agencies.

Credit Required for Completion: 21 credit hours

	Program Courses		Credits
_____	BUS 101	Beginning Document Processing	5
_____	BUS 105	Database Fundamentals	3
_____	BUS 108	Word Processing	7
_____	BUS 202	Spreadsheet Fundamentals	3
_____	SCT 100	Introduction to Microcomputers	3

Microsoft Word Applications User

The certificate program prepares students to be end users of Microsoft Word. The program emphasizes keyboarding and Microsoft Word operations necessary for successful employment. It provides short-term training for students desiring to progress in their occupation or who want to gain more technological understanding

Career Opportunities
Graduates may find employment in office settings as executive or administrative secretaries. The Microsoft Word certification promotes marketability of the graduate.

Credit Required for Completion: 18 credit hours

	Program Courses		Credits
_____	BUS 101	Beginning Document Processing	5
_____	BUS 108	Word Processing	7
_____	BUS 201	Advanced Word Processing	3
_____	SCT 100	Introduction to Microcomputers	3

Office Accounting Specialist

The Office Accounting Specialist certificate is designed to provide entry-level training in accounting for those who need to prepare quickly for employment. Courses provide training in basic accounting theory and the application of accounting principles in computerized operations. All courses apply toward present accounting diploma or degree programs.

Career Opportunities
Graduates may be employed as entry-level bookkeeper or accounting assistant in a computerized environment.

Credit Required for Completion: 18 credit hours

	Program Courses		Credits
_____	ACC 101	Principles of Accounting I	6
_____	ACC 102	Principles of Accounting II	6
_____	ACC 104	Computerized Accounting	3
_____	SCT 100	Introduction to Microcomputers	3

Office Management Assistant

The Office Management Assistant program is designed to provide educational opportunities and skills to individuals who desire training to successfully pursue a career in the office management field. Learning opportunities are provided in classroom and laboratory settings using up-to-date equipment relevant to the workplace. Most of the courses taken in this program may also count toward a diploma in Information and Office Technology.

Career Opportunities
Students completing the Office Management Assistant program should find employment in a variety of office settings. Students will be qualified to offer a variety of skills to future employers.

Credit Required for Completion: 42 credit hours

	Program Courses		Credits
_____	ENG 111	Business English	5
_____	ENG 112	Business Communications	5
_____	MAT 111	Business Math	5
_____	EMP 100	Interpersonal Relations and Professional Development	3
_____	ACC 101	Principles of Accounting I	6
_____	BUS 101	Beginning Document Processing	5
_____	BUS 106	Office Procedures	5
_____	SCT 100	Introduction to Microcomputers	3
_____	MKT 101	Principles of Management	5

Patient Care Assisting

The purpose of the Patient Care Assisting certificate program is to emphasize the general concepts of basic patient care. It provides the necessary education in preparing students to become competent nursing assistants. Program graduates will be administered competency testing for Certified Nurse Assistant (CNA) in the State of Georgia. Upon employment in various health settings, the graduate works under the direct supervision of a licensed nurse.

Career Opportunities
Graduates may find employment in nursing homes and home health agencies.

Credit Required for Completion: 16 credit hours

	Program Courses		Credits
_____	AHS 103	Nutrition and Diet Therapy	2
_____	AHS 109	Medical Terminology for Allied Health Sciences	3

(*continued*)

_____	CNA 100	Patient Care Fundamentals	8
_____	EMP 100	Interpersonal Relations and Professional Development	3

Patient Care Technician

This program is designed to meet the needs of students looking to enter the health services field or for students who have completed the Patient Care Assisting (PCA) program. The completion of the PCA program, which includes the state Certified Nursing Assistant (CNA) course, will prepare students for the advanced skills of the Patient Care Technician (PCT) program.

Career Opportunities
Graduates may find employment in nursing homes, home health agencies, and hospitals.

Credit Required for Completion: 23 credit hours

	Program Courses		**Credits**
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 103	Nutrition and Diet Therapy	2
_____	CNA 100	Patient Care Fundamentals	8
_____	PCT 100	Technical Skills for PCT	8

Phlebotomy Technician

The Phlebotomy Technician program is a sequence of courses that prepares students for careers in the phlebotomy field and for the national certification exam. The program emphasizes a combination of phlebotomy theory and practical application necessary for successful employment.

Career Opportunities
Graduates may find employment collecting blood samples for testing in hospitals, doctors' offices and private labs.

Credit Required for Completion: 26 credit hours

Students are accepted into the program fall and spring quarters. Class size will be held to a maximum of 20 participants.

	Program Courses		**Credits**
_____	AHS 101	Anatomy and Physiology	5
_____	AHS 104	Introduction to Health Care	3
_____	AHS 109	Medical Terminology for Allied Health Sciences	3
_____	PHL 103	Introduction to Venipuncture	4

	(*continued*)		
_____	PHL 105	Clinical Practice	8
_____	SCT100	Introduction to Microcomputers	3

Residential Electrical Apprentice

The Residential Electrical Apprentice certificate program provides the student with the knowledge, skills and techniques to meet entry-level occupational requirements in the industry specifically in residential electrical applications. Completion of this certificate will allow many existing technicians already in field to update and strengthen certain skills.

Career Opportunities
Graduates may find employment with a number of firms both small and large. Local residential contractors as well as larger organizations will continue to have a need for individuals with basic entry-level skills in electricity. As mentioned above, the residential electrical market may be the best avenue for employment as an individual with a basic electrical knowledge. Concurrently, this certificate will lead into further educational opportunities as the graduate chooses to expand and specialize.

Credit Required for Completion: 26 credit hours

	Program Courses		**Credits**
_____	IFC 100	Industrial Safety Procedures	2
_____	IFC 101	Direct Currents Circuits I	4
_____	MAT 101	General Mathematics	5
_____	ELT 106	Electrical Prints, Schematics and Symbols	4
_____	ELT 120	Residential Wiring I	5
_____	ELT 121	Residential Wiring II	6

Shampoo Technician

The Shampoo Technician certificate introduces courses that prepare 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, skin, hair, hair treatments and manipulations, hair styling, artificial hair, braiding/intertwining hair, reception sales, management, employability skills and work ethics. Graduates receive a Shampoo Technician Technical Certificate of Credit and are employable as a Cosmetology salesperson, salon manager, or salon owner.

Career Opportunities
Graduates are employable as cosmetology salespersons, salon managers, or salon owners.

Credit Required for Completion: 18 credit hours

	Program courses		Credits
_____	COS 100	Introduction to Cosmetology Theory	5
_____	COS 103	Introduction to Skin, Scalp, and Hair	2
_____	COS 105	Introduction to Shampooing and Styling	4
_____	COS 106	Introduction to Haircutting	3
_____	COS 117	Salon/Shop Management	4

Small Business Marketing Manager

The Small Business Marketing Manager Certificate Program prepares students for employment in a variety of occupations with emphasis placed on business ownership or management. Students are also prepared for work in sales, retail, service occupations, and other marketing related fields. The certificate program also offers an excellent beginning point to enter the Marketing Management diploma or degree. At completion the students will receive a Small Business Marketing Manager certificate.

Career Opportunities
Graduates may open their own business or may manage a business or work in retail, service, or other marketing related fields to prepare for future business ownership.

Credit Required for Completion: 32 credit hours

	Program Courses		Credits
_____	MKT 100	Introduction to Marketing	5
_____	MKT 103	Business Law	5
_____	MKT 106	Fundamentals of Selling	5
_____	MKT 108	Advertising	4
_____	MKT 110	Entrepreneurship	8
_____	MKT 123	Small Business Management	5

Welding—Flat Shielded Metal Arc Welder

The Flat Shielded Metal Arc Welder program prepares students for careers in shielded metal arc welding. The training is designed for those students who seek entry-level employment in field. Instruction includes theory and practical application on basic welding functions.

NOTE: Welders need good eyesight, hand-eye coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods and be able to bend, stoop, and work in awkward positions. In addition, welders increasingly need to be willing to receive training and perform tasks in other production jobs.

Career Opportunities
Graduates are employable at an entry level in the welding field.

Credit Required for Completion: 16 credit hours

	Program Courses		Credits
_____	WLD 100	Introduction to Welding Technology	6
_____	WLD 101	Oxyfuel Cutting	4
_____	WLD 104	Shielded Metal Arc Welding I	6

Welding—Gas Metal Arc Welder Fabricator

The Gas Metal Arc Welder Fabricator program prepares students for careers in gas metal arc welding.

NOTE: Welders need good eyesight, hand-eye coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods and be able to bend, stoop, and work in awkward positions. In addition, welders increasingly need to be willing to receive training and perform tasks in other production jobs.

Career Opportunities
Graduates are employable at an entry level in the welding field.

Credit Required for Completion: 19 credit hours

	Program Courses		Credits
_____	WLD 100	Introduction to Welding Technology	6
_____	WLD 101	Oxyfuel Cutting	4
_____	WLD 109	Gas Metal Arc Welding	6
_____	Elective		3

Welding—Gas Tungsten Arc Welder

The Gas Tungsten Arc Welder certificate program provides basic training in gas tungsten metal arc welding applications. The training is designed for those students who seek entry-level employment in field. Instruction includes theory and practical application on basic welding functions. Courses include basic cutting and gas tungsten arc welding.

NOTE: Welders need good eyesight, hand-eye coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods and be able to bend, stoop, and work in awkward positions. In addition, welders increasingly need to be willing to receive training and perform tasks in other production jobs.

Career Opportunities
Graduated may find employment as entry-level Gas Tungsten Arc Welders or related positions in the welding field.

Credit Required for Completion: 17 credit hours

	Program Courses		Credits
_____	WLD 100	Introduction to Welding Technology	6
_____	WLD 101	Oxyfuel Cutting	4
_____	WLD 110	Gas Tungsten Arc Welding TIG	4
_____	Elective		3

Welding—Overhead Shielded Metal Arc Welder

This certificate program prepares students for careers in shielded metal arc welding.

NOTE: Welders need good eyesight, hand-eye coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods and be able to bend, stoop, and work in awkward positions. In addition, welders increasingly need to be willing to receive training and perform tasks in other production jobs.

Career Opportunities
Graduates may find employment as entry level Shielded Metal Arc Welders or related positions in the welding field.

Credit Required for Completion: 18 credit hours

	Program Courses		Credits
_____	WLD 105	Shielded Metal Arc Welding II	6
_____	WLD 106	Shielded Metal Arc Welding III	6
_____	WLD 107	Shielded Metal Arc Welding IV	6

Course Descriptions

Course prefixes preceded by an asterisk (i.e. *BUS 101) in the Course Description section of this catalog indicate that course exemption examinations are available for these courses. Students should see program advisors about the procedures for requesting course exemption examinations and the schedule for the exams.

The instructional course categories are general core courses, occupational courses, and elective courses.

General Core courses–Common to many majors, general education courses include English or communications, humanities, speech communications, social or behavioral sciences, mathematics, and computer literacy.

Occupational courses–These courses are intended to develop skills and related knowledge for job performance and are part of the course sequence of an occupational program offered by the college. They are designed primarily for job preparation and/or upgrading and not for general education purposes.

Elective courses–The administration of the institution, the program faculty, and the program advisory committee cooperate in establishing and utilizing a system to recommend needed and feasible elective courses; advisors will determine the appropriateness of a student's choice of elective courses. The admissions requirements and prerequisites for the elective course must be met.

O.B.I –Occupation-based instruction is defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. Occupation-based instruction normally requires only limited out-of-class preparation by the student and no out-of-class practice assignments.

Prerequisite–A course that is required prior to taking another course or a more advanced course. Other conditional criteria required or necessary as a prior condition, such as placement scores or program admission.

Corequisite–A course that may be taken during the same quarter as another; simultaneous enrollment.

ACC - Accounting

ACC 101 - Principles of Accounting I
6.00 Credits/8 Contact hours
Prerequisite: Regular status
Introduces the basic 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 and accounting for a personal service business, the accounting cycle and accounting for a merchandising enterprise, and cash control. Laboratory work demonstrates theory presented in class.

ACC 102 - Principles of Accounting II
6.00 Credits/8 Contact hours
Prerequisites: ACC 101
Applies the basic principles of accounting to specific account classifications and subsidiary record accounting. Topics include receivables, inventory, plant assets, payroll, payables, partnerships, and sales tax returns. Laboratory work demonstrates theory presented in class.

ACC 103 - Principles of Accounting III
6.00 Credits/8 Contact hours
Prerequisite: ACC 102
Emphasizes a fundamental understanding of corporate and cost accounting. Topics include accounting for a corporation, statement of cash flows, cost accounting, budgeting and long term liabilities. Laboratory work demonstrates theory presented in class.

ACC 104 - Computerized Accounting
3.00 Credits/ 5 Contact hours
Prerequisites: ACC 102, SCT 100
Emphasizes operation of computerized accounting systems from manual input forms. Topics include equipment use, general ledger, accounts receivable and payable, payroll, cash management, and financial reports. Laboratory work includes theoretical and technical application.

ACC 106 – Accounting Spreadsheet Fundamentals
3.00 Credits / 5 Contact hours
Prerequisites: SCT 100
Provides instruction in the use of electronic spreadsheet software packages for program – related spreadsheet applications. Students become proficient in creation, modification, and combination of spreadsheet. Topics include spreadsheet creation, data entry, data entry modification, computation using functions, and program-related spreadsheet applications. Laboratory work includes theoretical and technical application.

ACC 120 - Principles of Auditing
5.00 Credits/5 Contact hours
Prerequisite: ACC 103
Introduces the student to the auditor's 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.

ACC 150 - Cost Accounting
6.00 Credits/8 Contact hours
Prerequisite: ACC 103
Emphasizes a thorough understanding of cost concepts, cost behavior, and cost accounting techniques as they are applied to manufacturing cost systems. Topics include job order cost accounting, process cost accounting, and standard cost accounting.

ACC 151 - Individual Tax Accounting
4.00 Credits/5 Contact hours
Provides instruction for preparation of both state and federal income tax. Topics include taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations.

ACC 152 - Payroll Accounting
4.00 Credits/5 Contact hours
Prerequisite: ACC 101
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.

ACC 155 - Legal Environment of Business
5.00 Credits/5 Contact hours
Prerequisite: Regular status
Introduces law and its relationship to business. Topics include legal ethics, legal processes, business contracts, business torts and crimes, real and personal property, agency and employment, risk-bearing devices, and Uniform Commercial Code.

ACC 156 - Business Tax Accounting
4.00 Credits/5 Contact hours
Prerequisite: ACC 101, ACC 151
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.

ACC 164 - Bookkeeper Certification Review
4.00 Credits/ 5 Contact hours
Prerequisite: Regular Status (ACC 102, ACC 152 recommended)
Reviews the topics of adjusting entries, correction of accounting errors, payroll, depreciation and inventory. Prepares the students to take certification testing.

ACT - Air Conditioning Technology

ACT 100 - Refrigeration Fundamentals
4.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces basic concepts and theories of refrigeration. Topics include the laws of thermodynamics, pressure and temperature relationships, heat transfer, refrigerant identification, the refrigeration cycle, and safety.

ACT 101 - Principles of Refrigeration
7.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 100
Introduces the use of refrigeration tools, materials, and procedures needed to install, repair, and service refrigeration systems. Topics include refrigeration tools; piping practices; service valves; leak testing; refrigerant recovery, recycling, and reclamation; evacuation; charging; and safety.

ACT 102 - Refrigeration Systems Components
7.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 100, ACT 101
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.

ACT 103 - Electrical Fundamentals
7.00 Credits/10 Contact hours
Prerequisite: Provisional admission
Introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electric diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety.

ACT 104 - Electric Motors
4.00 Credits/7 Contact hours
Prerequisite/Corequisite: ACT 103
Continues the development of skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, and installation procedures, types of electric motors, electric motor service, and safety.

ACT 105 - Electrical Components
5.00 Credits/8 Contact hours
Prerequisite/Corequisite: ACT 103
Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include pressure switches, overload devices, transformers, magnetic starters, other commonly used controls, diagnostic techniques, installation procedures, and safety.

ACT 106 - Electric Control Systems and Installation
4.00 Credits/7 Contact hours
Prerequisite/Corequisite: ACT 105
Provides instruction on wiring various types of air conditioning systems. Topics include servicing procedures, solid state controls, system wiring, control circuits, and safety.

ACT 107 - Air Conditioning Principles
8.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 102
Introduces fundamental theory and techniques needed to identify major components and functions of air conditioning systems. Instruction is given on types of air conditioning systems and use of instrumentation. Topics include types of AC systems, heat-load calculation, and properties of air, psychrometrics, duct design, air filtration, and safety principles.

ACT 108 - Air Conditioning Systems and installation
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: ACT 107
Provides instruction on the installation and service of residential air conditioning systems. Topics include installation procedures, service, split-systems, add-on-systems, packaged systems, and safety.

ACT 109 - Troubleshooting AC Systems
7.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 108, ENG 101
Provides instruction on troubleshooting and repair of major components of residential air conditioning systems. Topics include troubleshooting techniques, electrical controls, air flow, refrigeration cycle, and safety.

ACT 110 - Gas Heating Systems
5.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 102, ACT 106, MAT 101
Introduces principles of combustion and service requirements for gas heating systems. Topics include service procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

ACT 111 - Heat-Pumps and Related Systems
6.00 Credits/10 Contact hours
Prerequisite/Corequisite: ACT 110
Provides instruction on the principles, application, and operation of a residential heat pump system. Topics include installation procedures, servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, troubleshooting, valves, and safety.

AHS - Health Services

*AHS 101 - Anatomy and Physiology
5.00 Credits/5 Contact hours
Prerequisite: Regular status
Focuses on basic normal structure and function of the human body. Topics include medical terms describing the human body, and structure and function of the human body.

AHS 102 - Drug Calculation and Administration
3.00 Credits/4 Contact hours
Prerequisite: MAT 101, acceptance into nursing program
Utilizes basic mathematical concepts and includes basic drug administration. 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.

AHS 103 - Nutrition and Diet Therapy
2.00 Credits/2 Contact hours
Prerequisite: Acceptance in nursing program
A study of the nutritional needs of the individual. Topics include nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

*AHS 104 - Introduction to Health Care
3.00 Credits/5 Contact hours
Prerequisite: Provisional admission
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 basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control, and blood/air-borne pathogens

*AHS 109 - Medical Terminology for Allied Health Sciences
3.00 Credits/3 Contact hours
Prerequisite: Provisional admission
Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include Word origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, terminology related to the human anatomy, reading medical orders and reports, and terminology specific to the student's field of study.

AMF - Automated Manufacturing Technology

AMF 103 - Manufacturing Processes Survey
4.00 Credit hours/6 Contact Hours
Prerequisite: Provisional admission
Familiarizes students with the production processes a flexible manufacturing system may perform. Topics include modern manufacturing concepts; product manufacturing stages; manufacturing specifications and quality control; industrial materials; materials testing; casting and molding processes; materials cutting, removal, and forming processes; welding and joining processes; and parts assembly.

AMF 106 - Introduction to Robotics
4.00 Credit hours/7 Contact Hours
Prerequisite: Regular status
Explores basic robotic concepts. Studies robots in typical application environments. Topics include robot history and fundamentals, robot classification, power sources, robot applications in the workplace, robot control techniques, path control, end of arm tooling, robot operation and robot controllers, controller architecture in a system, robotic language programming, and human interface issues.

AMF 108 - Applied Hydraulics, Pneumatics, and Mechanisms
3.00 Credit hours/5 Contact Hours
Prerequisite: Regular status level math achievement
Emphasizes mechanical techniques for maintaining, troubleshooting, installing, and repairing drives, conveyor systems, and valves. Topics include gas laws; pressure and force calculations; hydraulic systems vs. pneumatic systems; cylinders, pressure controls, and system controls; hydraulic and pneumatic symbology; hydraulic and pneumatic system layout; interfacing hydraulic or pneumatic systems with other systems; applied mechanisms; belt, chain, and gear drives; drive train components valves; and conveyor systems.

AMF 113 - Programmable Controllers I
4.00 Credit hours/7 Contact Hours
Prerequisite: IFC 102
Studies basic programmable controller application skills and techniques as well as programmable controllers in typical environs and as an element of a complex manufacturing cell. Topics include CRT hardware; power-up and initialization; CRT capabilities and mode selection; rack addressing; basic ladder programming; ladder editing and display; time scan, data entry, monitoring, forcing, and cross referencing using the CRT as a terminal; and printer operation and printout routines.

AMF 115 - Manufacturing Control and Work Cell Interfacing
5.00 Credit hours/6 contact Hours
Prerequisite: Regular status level math achievement
Studies open and closed loop controls and cell level interfacing. Emphasized human factors related to automated systems. Topics include process control; sensors and interfacing; fluid pressure and level measurement; fluid flow instrument; instrument for temperature measurements; instruments for mechanical measurement; pneumatic controls; cell level interfacing; automatic control systems application; and human interface issues of operator training, acceptance, and safety.

AMF 206 - Work Cell Design Laboratory
3.00 Credit hours/5 Contact Hours
Prerequisite: AMF 115
Allows student to work in instructor-supervised teams, assembling and operating an automated production system's cell. Students will select equipment, write specifications, design fixtures and interconnects, integrate systems/provide interfaces, and operate the assigned system. Topics include work cell requirement analysis, work cell specifications, work cell assembly, work cell programming, work cell debugging/troubleshooting, and prototype or demonstration work cell operation.

AMF 207 - Flexible Manufacturing Systems I
4.00 Credit hours/6 Contact Hours
Prerequisite: AMF 115
Reviews flexible system electrical, electronic, and mechanical principles. Provides opportunities to plan and prepare for constructing and operating an actual flexible automated system. Topics include electrical, electronic, and mechanical systems; and flexible manufacturing system planning and preparation.

AMF 208 - Flexible Manufacturing Systems II
4.00 Credit hours/6 Contact Hours
Prerequisite: AMF 207
Corequisite: AMF 209
Continues studying flexible manufacturing systems. Students will employ planning documentation skills developed in AMF 207 to install an automated system, produce a first run product, and operate the system. Topics include system installation to produce a first run product and automated system operation.

AMF 209 - Flexible Manufacturing Systems Project
2.00 Credit hours/4 Contact Hours
Prerequisite: AMF 207
Corequisite: AMF 208
Provides an opportunity for students to use the flexible characteristics of the automated system developed in AMF 208. Emphasized changing the function or product produced by the automated system to adapt the automated system to function as a flexible system. Topics include adaptation of automated systems for flexible manufacturing.

AMF 214 - Programmable Controllers II
4.00 Credit hours/10 Contact Hours
Prerequisite: AMF 113
Continues and hands-on development of programming, operation and maintenance of industrial PLC systems. Instruction in advanced programming techniques for industrial control systems and automated industrial equipment will enhance the student's knowledge and understanding of the PLC's in an industrial plant. Topics include data manipulation instructions, math functions, program control instructions, communicating to external devices, and troubleshooting discrete I/O devices.

AMF 301 - Field Based Study I
5.00 Credit/15 Contact Hours
Occupation based instruction; defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. These courses are only utilized for accepting credits into Applied Manufacturing Technology programs. Company designated supervisors or trainers document predetermined field-based activities to the college coordinator for those programs.

AMF 302 - Field Based Study II
5.00 Credit/15 Contact Hours
Occupation based instruction; defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. These courses are only utilized for accepting credits into Applied Manufacturing Technology programs. Company designated supervisors or trainers document predetermined field-based activities to the college coordinator for those programs.

AMF 303 - Field Based Study III
5.00 Credit/15 Contact Hours
Occupation based instruction; defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. These courses are only utilized for accepting credits into Applied Manufacturing Technology programs. Company designated supervisors or trainers document predetermined field-based activities to the college coordinator for those programs.

AMF 304 - Field Based Study IV
5.00 Credit/15 Contact Hours
Occupation based instruction; defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies. These courses are only utilized for accepting credits into Applied Manufacturing Technology programs. Company designated supervisors or trainers document predetermined field-based activities to the college coordinator for those programs.

AUT - Automotive Technology

AUT 120 - Introduction to Automotive Technology
3 Credits/5 Contact Hours
Prerequisite: Provisional admission
Introduces basic concepts and practices necessary for safe and effective automotive shop operation. Topics include safety procedures, legal/ethical responsibilities, measurement; machining, hand tools, shop organization, management, and work flow systems.

AUT 122 - Electrical and Electronic Systems
6.00 Credits/10 Contact Hours
Prerequisite: AUT 120
Introduces automotive electricity. Topics include general electrical system diagnosis; lighting system diagnosis and repair; gauges, warning devices, and driver information system diagnosis and repair; horn and wiper/washer diagnosis and repair; accessories diagnosis and repair.

AUT 124 - Battery, Starting and Charging Systems
4 Credits/8 Contact Hours
Prerequisite: AUT 122
Emphasizes the basic principles, diagnosis, and service repair of batteries, starting systems, starting system components, alternators, and regulators. Topics include battery diagnosis and service; starting system diagnosis and repair; charging system diagnosis and repair.

AUT 126 - Engine Principles of Operation and Repair
6.00 Credits/12 Contact hours
Prerequisite: AUT 120
Introduces automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques. Topics include general 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.

AUT 128 - Fuel, Ignition, and Emission Systems
7.00 Credits/11 Contact hours
Prerequisite: AUT 122, AUT 124, AUT 126
Introduces fuel, ignition, and exhaust systems theory, diagnosis, repair, and service for vehicles with carburetion and fuel injection systems. Topics include general engine diagnosis; ignition system diagnosis and repair; fuel, air induction, and exhaust systems diagnosis and repair; positive crankcase ventilation; exhaust gas recirculation; engine related service.

AUT 130 - Automotive Brake Systems
4.00 Credits/6 Contact hours
Prerequisite: AUT 122
Introduces Brake systems theory and its application to automotive systems. Topics include: hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; miscellaneous (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair.

AUT 132 - Suspension and Steering Systems
4.00 Credits/6 Contact hours
Prerequisite: AUT 122
Introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include steering systems diagnosis and repair; suspension systems diagnosis and repair; wheel alignment diagnosis, adjustment and repair; wheel and tire diagnosis and repair.

AUT 134 - Drivelines
4.00 Credits/8 Contact hours
Prerequisite: AUT 122
Introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive driveline 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.

AUT 138 - Manual Transmission/Transaxle
4.00 Credits/6 Contact hours
Prerequisite: AUT122
Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service are included. Electronic controls related to transmission/transaxle operation are discussed. Topics include clutch diagnosis and repair, transmission/transaxle diagnosis and repair.

AUT 140 - Electronic Engine Control Systems
7.00 Credits/9 Contact hours
Prerequisite: AUT 128
Introduces concept of electronic engine control. Topics include computerized engine controls diagnosis and repair; intake air temperature controls; early fuel evaporation (intake manifold temperature) controls; evaporative emissions controls.

AUT 142 - Climate Control Systems
6.00 Credits/8 Contact hours
Prerequisite: AUT 122
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.

AUT 144 - Introduction to Automatic Transmissions
4.00 Credits/6 Contact hours
Prerequisite: AUT 122
Introduces students to basic transmission/transaxle theory, inspection, and service procedures. Focuses on minor in-car adjustments, replacements, and repair. Topics include general transmission and transaxle diagnosis; transmission and transaxle maintenance and adjustment; in-vehicle transmission and transaxle repair.

AUT 210 - Automatic Transmission Repair
7.00 Credits/11 Contact hours
Prerequisite: AUT 144
Introduces automatic transmission hydraulic/mechanical operations, transmission repair, and automatic transmission hydraulic/mechanical diagnosis. Topics include removal, disassembly, and reinstallation; oil pump and converter; gear train, shafts, bushings and case; friction and reaction units.

AUT 212 - Advanced Electronic Transmission Diagnosis
3.00 Credits/5 Contact hours
Prerequisite: AUT 210
Introduces automatic transmission hydraulic/mechanical and electronic diagnosis and repair. Topics include electronically controlled automatic transmission, automatic transmission electrical and electronic problem diagnosis and repair.

AUT 214 - Advanced Electronic Controlled Brake System Diagnosis
4.00 Credits/6 Contact hours
Prerequisite: AUT 130
Introduces anti-lock Brake system (ABS) to include ABS components and ABS operation, testing, and diagnosis. Topics include general Brake and anti-lock Brake systems diagnosis and testing, light truck rear anti-lock Brake system, four-wheel anti-lock Brake system locations, components, and operation.

AUT 216 - Advanced Electronic Controlled Suspension and Steering Systems
4.00 Credits/6 Contact hours
Prerequisite: AUT 132
Introduces principles of electronic suspension, electronic steering, and electronic active suspension. Topics include electronic steering systems diagnosis and adjustment/repair, and diagnosis of electrical and electronic controlled steering and suspension systems.

AUT 218 - Advanced Electronic Engine Control Systems
4.00 Credits/6 Contact hours
Prerequisite: AUT 140
Introduces On-Board Diagnostics II (OBD II), California Air Research Board (CARB) requirements and monitoring technology, diagnostic trouble code definitions, and essentials of advanced drivability diagnosis and data interpretation using a scanner. Topics include OBD II standards, monitoring capabilities, OBD II diagnostics, OBD II terms.

AUT 220 - Automotive Technology Internship
6.00 Credits/18 Contact hours
Prerequisite: AUT 128
Provides student work experience in the occupational environment. Topics include application of automotive technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

BIO - Biology

*BIO 193 - Anatomy and Physiology I
5.00 Credits/7 Contact hours
Prerequisite: Regular status
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, the integumentary system, the skeletal system, the muscular system, and the nervous and sensory systems. Laboratory experience supports classroom learning.

BIO 194 - Anatomy and Physiology II
5.00 Credits/7 Contact hours
Prerequisite: BIO 193 with a *C* or better
Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, the cardiovascular system, the blood and lymphatic systems, the immune system, the respiratory system, the digestive system, the urinary system, and the reproductive system. Laboratory experience supports classroom learning.

BIO 197 - Introductory Microbiology
5.00 Credits/7 Contact hours
Prerequisite: BIO 193 and BIO 194
Provides students with a foundation in basic microbiology with emphasis on infectious diseases. Topics include characterization, classification, and description of microorganisms; use of compound microscope; morphology and fine structure of bacteria; gram positive and gram negative bacteria; reproduction and growth of bacteria; viral diseases; host-parasite relationship; host defense mechanisms; epidemiology; antimicrobial and chemotherapeutic agents; control of microorganisms; and laboratory safety.

BUS - Business Office Technology

*BUS 101 Beginning Document Processing
5 Credits/10 Contact hours
Prerequisite: Provisional admission
Introduces the touch system of keyboarding placing emphasis on correct techniques, mastery of the keyboard, and basic business documents. Students attain a minimum typing speed of 30 words per minute with a maximum of 5 errors on a 5-minute timed keyboarding test. Topics include learning the keyboard, building speed and accuracy, formatting basic business documents, language arts, and proofreading. Laboratory practice parallels class instruction.

*BUS 102 Intermediate Document Processing
5 Credits/10 Contact hours
Prerequisite: BUS 101
Continues the development of keyboarding speed and accuracy with further mastery of correct keyboarding techniques. Students attain a minimum typing speed of 40 words per minute with a maximum of 5 errors on a 5-minute timed keyboarding test. Topics include building speed and accuracy, formatting and producing business documents, language arts, and proofreading. Laboratory practice parallels class instruction.

*BUS 103 Advanced Document Processing
5 Credits/10 Contact Hours
Prerequisite: BUS 102, ENG 111
Continues the development of keyboarding speed and accuracy with mastery of complex document production. Students attain a minimum typing speed of 50 words per minute with a maximum of 5 errors on a 5-minute timed keyboarding test. Topics include building speed and accuracy, integrated projects/applications, decision making, language arts, and proofreading. Laboratory practice parallels class instruction.

*BUS 105 - Database Fundamentals
3.00 Credits/5 Contact Hours
Prerequisite: Regular status, SCT 100
Emphasizes use of database management software packages to access, manipulate, and create file data. Topics include data entry, data access, data manipulation, database creation, and file documentation.

BUS 106 - Office Procedures
5.00 Credits/5 Contact Hours
Prerequisite: SCT 100 or program advisor approval
Emphasizes essential skills required for the business office. Topics include office protocol, time management, telecommunications and telephone techniques, office equipment, office mail, references, records management, and travel and meeting arrangements.

BUS 107 - Machine Transcription
3.00 Credits/5 Contact Hours
Prerequisite: BUS 102, ENG 111, SCT 100
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.

BUS 108 - Word Processing
7.00 Credits/10 Contact Hours
Prerequisite: SCT 100 and/or BUS 101
Emphasizes an intensive use of word processing software to create and revise business documents. Topics include equipment and supplies maintenance and usage, work area management, word processing software, and productivity.

BUS 201 - Advanced Word Processing
3.00 Credits/5 Contact hours
Prerequisites: BUS 108, ENG 111
Provides instruction in advanced word processing. Topics include advanced word processing concepts and applications, and proofreading.

*BUS 202 - Spreadsheet Fundamentals
3.00 Credits/5 Contact Hours
Prerequisite: SCT 100
Provides instruction in the use of electronic spreadsheet software packages for program-related spreadsheet applications. Students become proficient in creation, modification, and combination of spreadsheets. Topics include spreadsheet creation, data entry, date entry modification, computation using functions, and program-related spreadsheet applications. Laboratory work includes theoretical and technical application.

BUS 213 - Medical Document Processing/Transcription
5.00 Credits/10 Contact Hours
Prerequisite: BUS 102, BUS 108, AHS 109, ENG 111
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.

BUS 214 – Medical Transcription II
3 Credit / 5 Contact Hours
Prerequisite: Bus 213
Continues the development of speed and accuracy in the transcription of medical reports. Topics include equipment and supplies maintenance and usage, work area management, pronunciation, spelling, definitions, punctuation, typing speed and accuracy, and resource utilization.

BUS 216 - Medical Office Procedures
5.00 Credit hours/5 Contact Hours
Prerequisite: AHS 101
Emphasizes essential skills required for the medical office. Topics include medical law and ethics, patient relations/human relations, medical records management, scheduling appointments, health insurance and billing collection.

BUS 226 - Medical Office Billing/Coding/Insurance
5.00 Credits/5 Contact Hours
Prerequisite: AHS 101, AHS 109, BUS 101, ENG 111
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 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, guidelines and conventions, coding techniques, formats of the ICD-9 and CPT manuals, health insurance, billing and collections.

BUS 230 - PowerPoint
5.00 Credits / 9 Contact Hours
Prerequisite: (SCT 100 recommended)
Emphasizes an intensive use of presentation graphics software (PowerPoint) to create presentations that will be delivered over a variety of media. This course will cover the competencies needed for the Microsoft PowerPoint Expert Specialist Certification.

BUS 235 - Advanced Access
5.00 Credits / 10 Contact Hours
Prerequisite: BUS 105
Advanced study of Microsoft Access including developing a database application, working with HTML documents, data access pages, and hyperlink fields, using query wizards, action queries, and briefcase replications, automating tasks with macros, and using and writing Visual Basic for Applications.

BUS 240 - Advanced Excel
5.00 Credits / 10 Contact Hours
Prerequisite: BUS 202
Advanced study of Microsoft Excel including developing an Excel application, working with multiple worksheets and workbooks, creating data tables and using Scenario Manager, using solver for complex problems, importing data into Excel, and enhancing Excel with Visual Basic.

BUS 263 - Electronic Mail Fundamentals
3.00 Credit hours/5 Contact Hours
Prerequisite: Regular status
Provides instruction in the fundamentals of communicating with others inside and outside the organization. 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 usage, tasks usage, notes usage, and integration with other applications.

CHM - Chemistry

CHM 191 - Chemistry I
5.00 Credits/7 Contact Hours
Prerequisite: Program admission level math achievement
Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, atomic structure, chemical bonding, and physical states of matter, nomenclature, and stoichiometry.

CHM 192 - Chemistry II
5.00 Credits/7 Contact Hours
Prerequisite: CHM 191 with grade of *C* or better
Continues the exploration of basic chemical principles and concepts. Topics include: equilibrium theory, solution chemistry, acid-base theory, and nuclear chemistry.

CLT - Medical Laboratory Technology

CLT 101 - Introduction to Clinical Laboratory Technology
3.00 Credits / 5 Contact Hours
Prerequisite: Regular status
Introduces students to the terms, concepts, procedures, and equipment used in a professional medical laboratory. Topics include professional ethics and regulatory agencies; basic laboratory safety, equipment, and techniques; phlebotomy/specimen processing; quality control concepts; process improvement; documentation; and point of care testing. Practical experience in phlebotomy will be provided in the institution laboratory and/or the clinical setting.

CLT 103 - Urinalysis/Body Fluids
3.00 Credits / 5 Contact Hours
Prerequisite/Corequisite: BIO 193, BIO 194, AHS 104, CLT 101
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 theory of urinalysis; physical, chemical, and microscopic urinalysis; urinalysis and disease state correlation; special urinalysis and related testing; body fluids tests; and safety and quality control.

CLT 104 - Hematology/Coagulation
8.00 Credits / 12 Contact Hours
Prerequisite/Corequisite: BIO 193, BIO 194, AHS 104, MAT 191, CLT 101
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 tests, correlation of test results to disease states, coagulation and fibrinolysis, instrumentation for hematology and coagulation, critical values and blood cell dycrasias, safety and quality control, and process improvement.

CLT 105 - Serology/Immunology
3.00 Credits / 5 Contact Hours
Prerequisite/Corequisite: BIO 193, BIO 194, AHS 104, MAT 191, MLT 101
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, common serological techniques, safety and quality control, and process improvement.

CLT 106 - Immunohematology
7.00 Credits / 10 Contact Hours
Prerequisite: CLT 105
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, pre-transfusion testing, management of disease states and transfusion reactions, safety, documentation/quality control, and process improvement.

CLT 107 - Clinical Chemistry
7.00 Credits / 10 Contact Hours
Prerequisite/Corequisite: BIO 193, 194; AHS 104, CHM 191, 192; MAT 191, CLT 101
Develops concepts and techniques of clinical chemistry applicable to medical laboratory technology. Topics include carbohydrates, electrolytes and acid-base balance, nitrogenous compounds, 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.

CLT 108 - Microbiology
8.00 Credits / 12 Contact Hours
Prerequisite/Corequisite: BIO 193, 194, AHS 104, CHM 191, 192, CLT 101, MAT 191
Introduces fundamental microbiology and parasitology theory and techniques applicable to disease state identification. Topics include microbiology fundamentals; basic techniques; clinical microbiology; anti-microbial sensitivity; safety and quality control; parasitology; mycology, mycobacteriology, and virology; correlation of disease states; and process improvement.

CLT 109 - Clinical Phlebotomy, Urinalysis, and Serology Practicum
4.00 Credits / 12 Contact Hours
Prerequisite/Corequisite: CLT 101, CLT 103, CLT 105
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 follow through. Topics include basic and specialized 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.

CLT 110 - Clinical Immunohematology Practicum
6.00 Credits / 20 Contact Hours
Prerequisite/Corequisite: CLT 106
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 follow 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.

CLT 111 - Clinical Hematology/Coagulation Practicum
6.00 Credits / 20 Contact Hours
Prerequisite/Corequisite: CLT 104
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 follow 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.

CLT 112 - Clinical Microbiology Practicum
6.00 Credits / 20 Contact Hours
Prerequisite: CLT 108
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 follow through. Topics include specimen inoculations; stains; culture work-ups; bacterial identification; anti-microbial sensitivity; media preparation; special areas; 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.

CLT 113 - Clinical Chemistry Practicum
6.00 Credits / 20 Contact Hours
Prerequisite: CLT 107
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 follow through. Topics include therapeutic drugs and toxicology; automated and manual chemistry; immuno 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.

CIS - Computer Information Systems

SCT 100 - Introduction to Microcomputers
3.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces the fundamental concepts and operations necessary to use microcomputers. Emphasis is placed on basic functions and familiarity with computer use. Topics include computer terminology, introduction to the Windows environment, introduction to networking, introduction to word processing, introduction to spreadsheets, and introduction to databases.

*CIS 103 - Operating Systems Concepts
6.00 Credits/8 Contact Hours
Prerequisite: SCT 100
Provides an overview of operating systems functions and commands that are necessary in a computer working environment. Topics include multiprogramming, single and multi-user systems, resource
management, command languages, and operating system utilities, file system utilization and multiple operating systems.

*CIS 105 - Program Design and Development
5.00 Credits/5 Contact Hours
Prerequisite: Keyboarding skills/Corequisite: CIS 106
Provides an emphasis on business problem identification and solution through systems of computer programs using such tools as structure charts, flowcharts, and pseudocode. Topics include problem solving process, fundamentals of structured programming, program development building blocks, fundamentals of file and report structure, and business application structure.

*CIS 106 - Computer Concepts
5.00 Credits/5 Contact Hours
Prerequisite/Corequisite: SCT 100
Provides an overview of computers and information processing. Topics include computer history and terminology, data representation, data storage concepts, fundamentals of information processing, fundamentals of hardware operation, fundamentals of communications and networking, structured programming concepts, program development methodology, system development methodology, and computer number systems.

CIS 122 - Microcomputer Installation and Maintenance
7.00 Credits/10 Contact hours
Prerequisite: CIS 103
Provides an introduction to the fundamentals of installing and maintaining microcomputers. Topics include identifying components and their functions, safety, installation procedures, troubleshooting techniques, and preventive maintenance.

CIS 127 - Advanced Word Processing and Desktop Publisher Techniques
6.00 Credits / 8 Contact Hours
Prerequisite: SCT 100
Provides a study of word processing and desktop publishing. Topics include desktop publishing concepts, advanced word processing concepts, development of macros, presentation graphics concepts, and trouble shooting applications.

CIS 157 - Introduction to Visual Basic
7.00 Credits/10 Contact Hours
Prerequisite: CIS 105
Introduces Microsoft Windows event-driven programming. Along with this new method of programming, common elements of Windows applications will be discussed. These elements will be created and manipulated using Microsoft's Visual BASIC development environment. Topics include Windows applications, user interface design, capturing and validating input, event-driven programming design, conditional processing, file processing, and incorporating graphics.

CIS 252 - Intro to JAVA Programming
7.00 Credits/10 Contact Hours
Prerequisite: CIS 105, CIS 106
Course designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK and Notepad as an editor. 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.

CIS 260 - Introduction to Fourth Generation Languages
7.00 Credits/10 Contact hours
Prerequisite: CIS 157
Provides skills and knowledge required for use of fourth generation languages. Topics include fourth generation languages, advantages and disadvantages of the fourth generation languages, fourth generation language structure, and fourth generation language applications.

CIS 1140 - Networking Fundamentals
6.00 credits/8 contact hours
Prerequisite: SCT 100 and CIS 106 or advisor approval
Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. Covers a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. 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.

CIS 2149 - Implementing Microsoft Windows Professional
6.00 Credits/8 contact hours
Prerequisite: CIS xxx, an operating systems course, and CIS 1140 or advisor approval
Provides the ability to implement, administrator, and troubleshoot Windows Professional as a desktop operating system in any network environment.

CIS 2150 - Implementing Microsoft Windows Server
6.00 Credits/8 Contact Hours
Prerequisite: CIS 2149
Provides the ability to implement, administrator, and troubleshoot Windows 2000 Server as a member server of a domain in an Active Directory.

CIS 2153 - Implementing Microsoft Windows Networking Infrastructure
6.00 Credits/8 Contact Hours
Prerequisite: CIS 2150
Provides students with knowledge and skills necessary for new-to-product support professionals who will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows server family of products.

CIS 2154 - Implementing Microsoft Windows Network Directory
6.00 Credits/8 Contact Hours
Prerequisite: CIS 2153
Provides students with knowledge and skills necessary to install, configure, and administer the Microsoft Windows Active Directory service. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.

CIS 2211 – Web Site Design Tools
6.00 Credits / 8 Contact hours
Prerequisite: Regular status
Teaches an understanding of how to create and manage impressive web pages using the sizable amounts of new technology available on the Web. Students will learn to create web sites using various web tools such as FrontPage, NetObjects Fusion, Dynamic HTML, and various multimedia and CSS standards.

*CIS 2228 – Comprehensive Spreadsheet Techniques
6.00 Credits/8 Contact Hours
Prerequisite: SCT 100
Provides a study of spreadsheets. Topics include advanced spreadsheet concepts, development of macros, data integration concepts, and troubleshooting spreadsheets.

*CIS 2229 - Comprehensive Database Techniques
6.00 Credits/8 Contact Hours
Prerequisites: SCT 100
Provides a study of databases. Topics include advanced database management concepts, development of macros, data integration concepts, development of user interfaces, relational database concepts, and troubleshooting databases.

CNA - Certified Nurse Assistant

CNA 100 - Patient Care Fundamentals
8.00 Credits/11 Contact hours
Prerequisite: Provisional admission
Introduction to Certified Nurse Assistant fundamentals, introductory anatomy and physiology, Cardio-Pulmonary Resuscitation (CPR), and nutrition and diet therapy.

COL - College Success

COL 099 – College Success
2.00 Credits / 2 Contact Hours
Prerequisite: Developmental or provisional admission
This course is designed to help students increase their success in college. The course will focus on assisting in developing practical study skills and techniques that will enhance academic success and increase the enjoyment of learning. In addition, the students will be exposed to academically supportive resources which are available on campus and in the community.

COS - Cosmetology

COS 100 - Introduction to Cosmetology Theory
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces the fundamental theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include state and local laws, rules, and regulations; professional image; bacteriology; decontamination and infection control; chemistry fundamentals; safety; Hazardous Duty Standards Act compliance; and anatomy and physiology.

COS 101 - Introduction to Permanent Waving/Relaxing
2.00 Credits/3 Contact hours
Prerequisite: COS 100
Introduces the chemistry and chemical reactions of permanent wave solutions and relaxers. Topics include permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical changes, safety procedures, and permanent wave and chemical relaxer application procedures on manikins.

COS 103 - Introduction to Skin, Scalp, and Hair
2.00 Credits/3 Contact hours
Prerequisite: COS 100
Introduces the theory, procedures, and products used in the care and treatment of the skin, scalp, and hair. Topics include basic corrective hair and scalp treatments, plain facial, products and supplies, diseases and disorders, and safety precautions.

COS 105 - Introduction to Shampooing and Styling
4.00 Credits/6 Contact hours
Prerequisite: COS 100
Introduces the fundamental theory and skills required to shampoo and create shapings, pincurls, finger waves, roller placement, and comb-outs. Laboratory training includes styling training to total 20 hours on manikins and 25 hours on live models without compensation. Topics include braiding/intertwining hair, shampoo chemistry, shampoo procedures, styling principles, pincurls, roller placement, fingerwaves, and comb out techniques, skipwaves, ridgecurls, and safety precautions.

COS 106 - Introduction to Haircutting
3.00 Credits/5 Contact hours
Prerequisite: COS 100
Introduces the theory and skills necessary to apply haircutting techniques. Safe use of haircutting implements will be stressed. Topics include haircutting terminology, safety, decontamination and precautions, cutting implements, haircutting techniques, client consultations, and head/hair/body analysis.

COS 108 - Permanent Waving and Relaxing
3.00 Credits/4 Contact hours
Prerequisite/Corequisite: COS 100, COS 101, COS 103, COS105, COS 106
Provides instruction in the application of permanent waves and 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 timed permanent wave, timed relaxer application, safety precautions, and Hazardous Duty Standards Act compliance.

COS 109 - Hair Color
6.00 Credits/8 Contact hours
Prerequisite/Corequisite: COS 100, COS 101, COS 103, COS 105, COS 106, COS 108
Presents the application of temporary, semi-permanent, deposit only, and permanent hair coloring and decolonization products. Topics include basic color concepts, classifications of color, safety precautions, consultation, communication and record and release forms, product knowledge, special problems in hair color and corrective coloring, and special effects.

COS 110 - Skin, Scalp, and Hair
3.00 Credits/4 Contact hours
Prerequisite/Corequisite: COS 100, COS 101, COS 103, COS105, COS 106, COS 108, COS 109
Provides instruction on and application of techniques and theory in the treatment of the skin, scalp, and hair. Emphasis will be placed on work with live models. Topics include implements, products and supplies, corrective hair and scalp treatments, facial procedures and manipulations, safety precautions, cosmetic chemistry/products and supplies, and treatment theory: electrotherapy, electricity and light therapy.

COS 111 - Styling
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: COS 100, COS 101, COS 103,COS105, COS 106, COS 108, COS 109, COS 110
Continues the theory and application of hairstyling and introduces thermal techniques. Topics include blow dry styling, thermal curling, thermal pressing, thermal waving, advanced cutting and styling, safety precautions, and artificial hair and augmentation.

COS 112 - Manicuring and Pedicuring
3.00 Credits/4 Contact hours
Prerequisite/Corequisite: COS 100, COS101, COS 103, COS 105, COS 106, COS 108, COS 109, COS 110 and COS 111
Provides manicuring and pedicuring experience on live models. Topics include implements, products and supplies, hand and foot anatomy, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and advanced nail techniques (wraps, tips, acrylics).

COS 113 - Practicum I
4.00 Credits/12 Contact hours
Prerequisite: COS 112, ENG 101, MAT 101, EMP 100, SCT 100
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 and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

COS 114 - Practicum II
8.00 Credits/15 Contact hours
Prerequisite/Corequisite: COS 113
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 and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; advanced styling and shaping; industry concepts; and surviving in the salon (transition from class to employment).

COS 115 - Practicum/Internship I
4.00 Credits/12 Contact hours
Prerequisite/Corequisite: COS 113, COS 114
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 or in a combination of a laboratory setting and an approved internship facility. The maximum number of internship hours for this course is 50 clock hours. Topics include permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

COS 116 - Practicum/Internship II
5.00 Credits/13 Contact hours
Prerequisite/Corequisite: COS 115
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 permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precaution/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

COS 117 - Salon Management
4.00 Credits/5 Contact hours
Prerequisite: COS 100 and regular status
Emphasizes the steps involved in opening and operating a privately owned cosmetology salon. Topics include planning a salon, business management, retailing, public relations, sales skills, career development and client retention.

CRJ - Criminal Justice Technology

CRJ 101 - Introduction to Criminal Justice Technology
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Examines the emergence, progress, and problems 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.

CRJ 103 - Corrections
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Provides an overview 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.

CRJ 104 - Principles of Law Enforcement
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Examines the principles of organization and administration and the duties of local and state law enforcement agencies with emphasis on police departments. 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.

CRJ 105 - Introduction to Criminal Procedure
5.00 Credits/6 Contact hours
Prerequisite: CRJ 101
Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Criminal Justice /overview of Constitutional Law.

CRJ 162 - Methods of Criminal Investigation
5.00 Credits/5 Contact hours
Prerequisite: Regular Status
Presents the fundamental principles of criminal investigation. Emphasis is placed on legal requirements stated in Georgia Criminal Law, definition of felony crimes stated in the Georgia Code and fundamentals of: investigative procedures, crime scene searches, identification and collection of evidence, note-taking and report writing, surveillance, identification of witnesses and suspects, interviews and interrogation, and preparation and presentation of evidence in court. Topics include Georgia Criminal Law, common investigative techniques, and procedures used for investigating various crimes.

CRJ 168- Criminal Law
5.00 Credits/5 Contact hours
Prerequisite: Regular status
This course emphasizes the historical development of criminal law in the United States and the current status of Georgia criminal law. The main focus of the course will be the statutory contents of the Official Code of Georgia Annotated (O.C.G.A), with primary emphasis on the criminal and traffic codes.

CRJ 202 - Constitutional Law
5.00 Credits/5 Contact hours
Prerequisite: CRJ 101
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 Constitution, and Bill of Rights and the Constitutional Amendments.

CRJ 206 - Criminology
5.00 Credits/5 Contact hours
Prerequisite: CRJ 104
Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include scope and varieties of crime; sociological, psychological, and biological causes of crime; criminal subculture and society's reaction; prevention of criminal behavior; behavior of criminals in penal and correctional institutions; and problems of rehabilitating the convicted criminal.

CRJ 207 - Juvenile Justice
5.00 Credits/5 Contact hours
Prerequisite: CRJ 101
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.

CRJ 209 - Criminal Justice Technology Practicum/Internship
5.00 Credits/15 Contact hours
Prerequisite: Completion of all required courses
Provides experiences necessary for further professional development and exposure to related agencies in the law enforcement field. The student will either pursue a study project directed by the instructor within the institution, or an internship in a related agency supervised by the instructor subject to the availability of an approved site. Topics include: observation and/or participation in law enforcement activities, law enforcement theory applications, and independent study project.

CRJ 212- Ethics in Criminal Justice
5.00 Credits/5 Contact hours
Prerequisite: Regular status
This course provides an exploration of the field of criminal justice ethics, which broadly encompasses the history of justice and theories of morality and ethics. It includes the study of ethics from both the individual perspective and the organizational standpoint. Special attention will be given to concrete ethical issues and dilemmas which are encountered regularly by participants in the major components of the criminal justice system. Four areas of ethical decision making opportunities are therefore studied in this course, including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics.

CTD - Commercial Truck Driving

CTD 101 - Fundamentals of Commercial Truck Driving
5.00 Credits/5 Contact hours
Prerequisite: Regular status
Fundamentals of Commercial Truck Driving introduces students to the trucking 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.

CTD 102 - Basic Operation and Range Work
5.00 Credits/8 Contact hours
Corequisite: CTD 101
This course focuses on familiarizing students with truck instruments and controls and on 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- operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking, and coupling & uncoupling.

CTD 103 - Advanced Operations
5.00 Credits/14 Contact hours
Corequisite: CTD 101, CTD 102
Advanced Operations focuses on developing driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. On the road, safe operating practices are integrated into the development of driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of 44 (forty four) hours BTW instructional time in any combination (with CTD 102) 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 a student is driving.

CTD 104 - Internship
5.00 Credits/15 Contact hours
Corequisite: CTD 101, CTD 102
The internship provides the opportunity for an individual to complete his or her training with a company. The internship takes the place of CTD 103- Advanced Operations. Working closely with the school, a company provides the advanced training which focuses on developing driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of 44 (forty four) hours BTW instructional time in any combination (with CTD 102) 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 a student is driving.

CUL - Culinary Arts

CUL 100 - Professionalism in Culinary Arts
3.00 Credit hours/3 Contact Hours
Prerequisite: Provisional admission
Provides an overview of the professionalism in culinary arts and culinary career opportunities. Chef history, pride, and "espirit d corp" are taught. Topics include cuisine, food service organizations, career opportunities, food service styles, and basic culinary management techniques.

CUL 110 - Safety, Sanitation, and Equipment
3.00 Credit/ 6 contact hours
Prerequisite: Provisional admission
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.

CUL 112- Principles of Cooking
5.00 Credit/ 10 contact hours
Prerequisite: Provisional admission
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, and recipe utilization. Laboratory demonstrations and student experimentation parallel class work

CUL 114 - American Regional Cuisine
5.00 Credit/ 10 contact hours
Prerequisite: CUL 110
Emphasis is on terms, concepts, and methods necessary to American Cuisine food preparation. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include kitchen aromatics, regional cooking principles and history, and methods of American regional food preparation. Laboratory demonstrations and student experimentation parallel class work.

CUL 116 - Food Service Purchasing and Control
3.00 Credit/ 4 contact hours
Prerequisite: MAT 100
Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

CUL 121 - Baking Principles I
5.00 Credit/ 10 contact hours
Prerequisite: CUL 110, CUL 112
Presents the fundamental terms, concepts, and methods involved in preparation of yeast and quick breads. Emphasis is placed on conformance of sanitation and hygienic work habits with health laws. Course content reflects American Culinary Federation Educational Institute cook and pastry apprenticeship training objectives, along with Retail Bakery Association training program. Topics include baking principles, baking ingredients, preparation of baked goods, baking sanitation and hygiene, and baking supplies and equipment. Laboratory demonstrations and student experimentation parallel class work.

CUL 122 - Baking Principles II
5.00 Credit/ 10 contact hours
Prerequisite: CUL 121
Presents the fundamental terms, concepts, and methods involved in preparation of baked products. Emphasis is placed on conformance of sanitation and hygienic work habits with health laws. Course content reflects American Culinary Federation Educational Institute cook and pastry apprenticeship training objectives, along with Retail Bakery Association training program. Topics include baking principles, baking ingredients, preparation of baked goods, baking sanitation and hygiene, and baking supplies and equipment. Laboratory demonstrations and student experimentation parallel class work.

CUL 124 - Restaurant and Hotel Baking
6.00 Credit/ 11 contact hours
Prerequisite: CUL 121, CUL 122
Provides in-depth experience in preparing many types of baked goods commonly found in restaurants and hotels. Course content reflects American Culinary Federation and Retail Bakery Association training objectives and provides background for those aspiring to become pastry chefs or bakery supervisors. Topics include breads, pies, cakes, pastry dough, puff pastry, icing, filling, and candy. Laboratory practice parallels class work.

CUL 127 - Banquet Preparation And Presentation
4.00 Credit/ 10 contact hours
Prerequisite: CUL 112
Provides experience in preparation of a wide variety of quantity foods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include kitchen operational procedures, equipment use, banquet planning, recipe conversion, food decorating, safety and sanitation, and production of quantity food. Laboratory practice is provided.

CUL 129 - Front of the House Service
3.00 Credit/ 5 contact hours
Prerequisite: Provisional admission
Introduces the fundamentals of dining and beverage service. Topics include dining service/guest service, dining service positions and functions, international dining services, restaurant business laws, preparation and setup, table side service, and merchandising. Laboratory practice parallels class work.

CUL 130 - Pantry, Hors D' Oeuvres and Canapes
5.00 Credit/ 10 contact hours
Prerequisite: CUL 114
Introduces basic pantry manger principles, utilization, preparation, and integration into other kitchen operations. Course content reflects American Culinary Federation Educational Institute apprenticeship pantry, garnishing, and presentation training objectives. Topics include pantry functions, basic garnishes, breakfast preparation, buffet presentation, cold preparations, cold sandwiches, salads and dressings, molds, garnishes, and cold hors d'oeuvres. Laboratory practice parallels class work.

CUL 132 - Garde Manger
5.00 Credit/ 10 contact hours
Prerequisite: CUL 114
Emphasizes basic garde manger utilization and preparation of appetizers, condiments, and hors d'oeuvres. Topics include hot and cold hors d'oeuvres; salads, dressings, and relishes; sandwiches; patés and terrines; chaudfroids, gelees, and molds; canapés; and garnishing, carving, and decorating. Laboratory practice parallels class work.

CUL 133 - Food Service Leadership and Decision Making
5.00 Credit/ 5 contact hours
Prerequisite: Provisional admission
Familiarizes the student with the principles and methods of sound leadership and decision making in the hospitality industry. Topics include basic leadership principles and how to use them to solicit cooperation, use of leadership to develop the best possible senior-subordinate relationships, the various decision making processes, the ability to make sound and timely decisions, leadership within the framework of the major functions of management, and delegation of authority and responsibility in the hospitality industry.

CUL 137 - Nutritional Food and Menu Management
3.00 Credit/ 7 contact hours
Prerequisite: CUL 100, CUL 110, CUL 112
Emphasizes menu planning for all types of facilities, services, and special diets. Topics include menu selection, menu development and pricing, nutrition, special diets, and cooking nutritional foods. Laboratory demonstrations and student management and supervision parallel class work.

CUL 215 - Contemporary Cuisine I
5.00 Credit/ 10 contact hours
Prerequisite: CUL 100, CUL 110, CUL 114
Emphasizes all modern cuisine and introduces management concepts necessary to the functioning of a commercial kitchen. Topics include international cuisine, cuisine trends, kitchen organization, kitchen management, kitchen supervision, and competition entry. Laboratory demonstration and student experimentation parallel class work.

CUL 220 - Contemporary Cuisine II
5.00 Credit/ 10 contact hours
Prerequisite: CUL 215
Emphasizes supervision, and management concepts, knowledge, and skills necessary to restaurants serving contemporary cuisine. Topics include menu selection, layout and design, on/off premise catering, entrepreneurship, and small business management. Laboratory demonstrations and student experimentation parallel class work.

CUL 216 - Practicum/Internship I
12.00 Credit/ 32 contact hours
Prerequisite: CUL 114, CUL 116, CUL 127
Provides the student with the opportunity to gain management/supervision experience in an actual job setting. Students will be placed in an appropriate restaurant, catering, or other food service business for four days per week throughout the quarter. On-the-job training topics include: restaurant management/on-off premise catering/food service business, supervisory training, and management training, on-off premise catering, hotel kitchen organization, kitchen management, restaurant kitchen systems, institutional food systems, kitchen departmental responsibilities, and kitchen productivity.

CUL 224 - International Cuisine I
6.00 Credit/ 11 contact hours
Prerequisite: CUL 100, CUL 110, CUL 114
Introduces international cuisine and acquisition of advanced cookery techniques. Course content reflects American Culinary Federation Educational Institute cook apprenticeship training objectives and provides background for those aspiring to become chefs. Topics include international cuisine, advanced grill cookery, advanced vegetable cookery, advanced meat cookery, advanced line cookery, and advanced fry cookery. Laboratory practice parallels class work.

DDF - CAD Operator Training

DDF 100 – Drafting Fundamentals
6.00 Credits/10 Contact hours
Prerequisite: Provisional admission
Introduces fundamental concepts and operations necessary to utilize microcomputers for developing fundamental drafting techniques. Emphasis is placed on the basic concepts, geometric terms/media sizes, and techniques necessary for CAD applications. Topics include history of drafting, safety practices, terminology, hardware and software care and use, basic entities, CAD commands, line relationships, basic CAD applications, and geometric construction.

DDF 102 - Size and Shape Description I
5.00 Credits/10 Contact hours
Prerequisite: DDF 100
Provides multiview and dimensioning techniques necessary to develop views that completely describe machine parts for manufacture. Topics include multiview drawing, basic dimensioning practices, tolerances and fits, sketching, and precision measurement.

DDF 103 - Size and Shape Description II
5.00 Credits/10 Contact hours
Prerequisite: DDF 102
Continues dimensioning skill development and introduces sectional views. Topics include advanced dimensioning practices and section views.

DDF 105 - Auxiliary Views
3.00 Credits/5 Contact hours
Prerequisite: DDF 103
Introduces techniques necessary for auxiliary view drawings. Topics include primary auxiliary views and secondary auxiliary views.

DDF 106 - Fasteners
3.00 Credits/5 Contact hours
Prerequisite: DDF 105
Provides knowledge and skills necessary to draw and specify fasteners. Topics include utilization of technical reference sources, types of threads, representation of threads, specifying threads, fasteners, and welding symbols.

DDF 107 - Introduction to CAD
6.00 Credit hours/10 Contact Hours
Prerequisite: SCT 100
Introduces basic concepts, terminology, and techniques necessary for CAD applications. Topics include terminology, CAD commands, basic entities, and basic CAD applications.

DDF 109 - Assembly Drawings I
5.00 Credits/10 Contact hours
Prerequisite: DDF 106
Provides knowledge and skills necessary to make working drawings. Topics include detail drawings, orthographic assembly drawings, pictorial assembly drawings and utilization of technical reference sources.

DDF 112 - 3D Drawing and Modeling
6.00 Credits/10 Contact hours
Prerequisite: DDF 103
Continues developing CAD utilization skills in discipline-specific applications. Topics include advanced CAD commands, CAD applications, macro utilization, application utilization, 3D modeling, rendering, advanced application utilization, and pictorial drawings.

DDS 205 - Residential Architectural Drawing I
6.00 Credits/10 Contact hours
Prerequisite: DDS 201
Introduces architectural drawing skills necessary to produce a complete set of construction drawings given floor plan information. Topics include footing, foundation, and floor plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; and specifications.

DDS 208 - Residential Architectural Drawing II
6.00 Credits/10 Contact hours
Prerequisite: DDS 205
Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include footing, foundation, and floor plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; specifications; and mechanical and electrical systems.

DEN - Dental Assisting

DEN 102 - Head and Neck Anatomy
2.00 Credits / 2 Contact Hours
Prerequisite: Provisional admission
Focuses on normal head and neck anatomy. Topics include osteology of the skull, muscles of mastication and facial expression, temporal mandibular joint, arterial and nerve supply of the head, and salivary glands and related structures.

DEN 106 - Oral Anatomy
5.00 Credits / 5 Contact Hours
Prerequisite: Regular status
Focuses on the development and functions of oral anatomy. Topics include dental anatomy, oral histology, and oral embryology.

DEN 134 - Dental Assisting I
7.00 Credits / 10 Contact Hours
Prerequisite: Regular status
Introduces students to chair side assisting with diagnostic and operative procedures. Topics include four-handed dentistry techniques, clinical data collection techniques, introduction to operative dentistry, dental material basics, CPR, infectious control procedures in dental environment with emphasis on CDC and ADA guidelines, and team concepts/continuous improvement effects as related to dentistry.

DEN 135 - Dental Assisting II
7.00 Credits / 10 Contact Hours
Prerequisite/Corequisite: DEN 134
Focuses on chair side assisting with operative and nonsurgical specialty procedures. Topics include operative dentistry, prosthodontic procedures (fixed and removable), orthodontics, and pediatric dentistry.

DEN 139 - Dental Radiology
5.00 Credits / 6 Contact Hours
Prerequisite/Corequisite: DEN 102, DEN 106
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 extra oral radiographic techniques, and quality assurance techniques.

DEN 140 - Dental Practice Management
5.00 Credits / 5 Contact Hours
Prerequisite: DEN 134
Emphasizes procedures for office management in dental practices. Topics include records management in dentistry, appointment control in dentistry, dental insurance form preparation, accounting procedures in dentistry, supply and inventory control as related to dentistry, and operation of basic business equipment. A computer lab provides basic skills in computer use and utilization of these skills to perform office procedures on a microcomputer.

DEN 146 - Dental Practicum I
2.00 Credits / 6 Contact Hours
Prerequisite/Corequisite: AHS 104,DEN 134, DEN 139
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, general dentistry procedures, and dental radiography procedures.

DEN 147 - Dental Practicum II
2.00 Credits / 6 Contact Hours
Prerequisite/Corequisite: DEN 135, DEN 146
Practicum focuses on chair side assisting with diagnostic and restorative procedures and clinical radiographic techniques. Topics include four-handed general dentistry procedures and dental radiographic procedures.

DET – Heavy Diesel Service Technician

DET 120 – Diesel Equipment Technology Internship
6.00 Credits/18 Contact Hours
Prerequisite: All required courses
Provides student work experience in the occupational environment. Topics include application of prerequisite knowledge and skills, practicing employability skills, problem solving, adaptability to job setting equipment and technology, and development of productivity and quality job performance through practice. The Truck Repair Technician Internship is implemented through the use of written individualized training plans, written performance evaluation, and required integrative experiences.

DET 121 – Overview of Diesel Technology, Tools, and Safety
5.00 Credits/10 Contact Hours
Prerequisite: Regular status
Introduces basic knowledge and skills the student must have to succeed in the DET field. Topics include an overview of diesel powered vehicles, diesel technology safety skills, basic tools & equipment, reference materials, measuring instruments, shop operation, mechanical fasteners, seals & bearings, and fluids & lubricants. Classroom and lab experiences on safety, precision measuring, and basic shop practices are highly emphasized.

DET 125 – Electrical/Electronic Systems
6.00 Credits/10 Contact Hours
Prerequisite: DET 121
Introduces basic electrical/electronic systems used on medium/heavy duty trucks and heavy equipment. Topics include introduction to diesel electrical & electronic systems, understanding circuits & circuit devices, developing basic diagnosis & repair skills, and understanding vehicle computer controls. Classroom and lab instruction on digital meter usage and interpreting is highly emphasized.

DET 127 – Starting and Charging Systems
5.00 Credits/10 contact Hours
Prerequisite: DET 125
Introduces starting and charging systems used on medium/heavy duty trucks and heavy equipment. Topics include battery diagnosis & servicing, starting systems diagnosis & repair, and charging systems diagnosis & repair. Using and interpreting test instruments and troubleshooting is highly emphasized.

DET 129 – Hydraulic Systems I
2.00 Credits/5 Contact Hours
Prerequisite: DET 125
Introduces basic hydraulic principles and systems used on medium/heavy duty trucks and heavy equipment. Topics include hydraulic theory, lines, fittings, & couplings, and fluids & lubricants. Classroom and lab experiences on basic hydraulic systems, preventative maintenance and safety are highly emphasized.

DET 131 – Electronic Controls and Accessory Systems
6.00 Credits/10 Contact Hours
Prerequisite: DET 125
Introduces electronic controls and accessory systems used on medium/heavy duty trucks and heavy equipment. Topics include lighting systems diagnosis & repair, driver information systems diagnosis & repair, related electrical components, and miscellaneous electrical accessories. Using and interpreting test instruments and troubleshooting is highly emphasized.

DET 132 – Diesel Engine Overhaul and Servicing I
4.00 Credits/10 Contact Hours
Prerequisite: DET 125
Introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include introduction to engine principles & procedures, engine disassembly & cleaning procedures, engine components failure analysis, and engine parts procurement. Using and interpreting test and measuring instruments is highly emphasized.

DET 135 – Diesel Engine Fuel Systems, Tune-up & Performance
4.00 Credits/10 Contact Hours
Prerequisite: DET 125
Introduces fuel systems used on medium/heavy trucks and heavy equipment. Topics include basic fuel systems & components, mechanical fuel injection systems, electronic fuel injection diagnosis & repair, emissions, general engine diagnosis, and tune-up & preventative maintenance. Interpreting test instruments along with diagnosing and troubleshooting are highly emphasized.

DET 230 – Hydraulic Systems II
4.00 Credits/10 Contact Hours
Prerequisite: DET 129
Introduces hydraulic systems and components used on heavy equipment. Classroom and lab instruction on components and systems emphasizes the use of testing and diagnosis equipment. Topics include introduction to hydraulics, reservoirs, lines, fittings, couplers, seals, fluids & filters, accessories, and general maintenance.

DET 233 – Heavy Equipment Power Train Systems I
4 Credits/10 Contact Hours
Prerequisite: DET 125
Introduces powertrains used on heavy equipment such as bulldozers, excavators, wheel loaders, and back-hoe loaders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include powertrain theory & principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, failure analysis, and terminology.

DET 234 – Heavy Equipment Power Train Systems II
4.00 Credits/10 Contact Hours
Prerequisite: DET 233
A continuation of DET 233, introducing powertrains used on heavy equipment such as bulldozers, excavators, wheel loaders, and back-hoe loaders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, failure analysis, and terminology.

DHY - Dental Hygiene

DHY 100 - Tooth Anatomy and Root Morphology
3.00 Credits/4 Contact Hours
Prerequisite: Regular status
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.

DHY 101 - Oral Embryology and Histology
2.00 Credits/2 Contact Hours
Prerequisite: Regular status
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 muscle tissue, and histology of nerve tissue, histology of connective tissue, embryological development of the head and neck, tooth development and development of tooth supporting structures.

DHY 102 - Head and Neck Anatomy
3.00 Credits/3 Contact Hours
Prerequisite: DHY 101
Focuses on the anatomy of 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, and facial spaces and the spread of dental infections.

DHY 103- Dental Materials
3.00 Credits/4 Contact Hours
Prerequisite: DHY 100
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 material standards, dental material properties, impression materials, gypsum products, mouth guards and whitening systems, dental bases, liners and cements, temporary restorations, classifications for restorative dentistry, direct restorative materials, and indirect restorative materials, polishing procedures for dental restorations, removable dental prostheses, sealants and implants.

DHY 104 - Preclinical Dental Hygiene Lecture
2.00 Credits/2 Contact Hours
Prerequisite: AHS 104, DHY 100
Provides fundamental skills to be utilized in the delivery of optimum patient care by the dental hygienist. Topics include professionalism, asepsis, patient assessment, emergencies, instrumentation, charting, patient and clinician positioning, ethics, and oral health education.

DHY 105 - Preclinical Dental Hygiene Lab
2.00 Credit Hours/6 Contact Hours
Prerequisite: DHY 100
Provides fundamental skills to be utilized in the delivery of optimum patient care by the dental hygienist. Topics include Professionalism, asepsis, patient assessment, emergencies, instrumentation, charting, patient/clinician positioning, ethics, and oral health education.

DHY 108 - Radiology
3.00 Credits/5 Contact Hours
Prerequisite: DHY 103
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 need, radiographic quality assurance, imaging theory, radiographic interpretation, and legal issues of dental radiography.

DHY 110 - Clinical Dental Hygiene I Lecture
2.00 Credits/2 Contact Hours
Prerequisite: DHY 104
Continues the development of knowledge in patient care. Topics include caries, prevention, occlusion, instrumentation, dental appliances, patient management, interdental care and impression and study cast techniques.

DHY 111 - Clinical Dental Hygiene I Lab
3.00 Credits/9 Contact Hours
Prerequisite: DHY 105
Continues the development of student skills in patient care. Topics include caries, prevention, occlusion, instrumentation, dental appliances, impression and study cast techniques, interdental care, and applied techniques.

DHY 112 - Biochemistry Fundamentals for Dental Hygienists
3.00 Credits/3 Contact Hours
Prerequisite: CHM 191
Provides a basic introduction to organic chemistry and biochemistry. Topics include molecular structure, carbohydrates, proteins, DNA and RNA, nutrition and digestion, and bioenergetics.

DHY 200 - Periodontology
4.00 Credits/ 4 Contact Hours
Prerequisite: DHY 111
Provides fundamental information on periodontal anatomy, pathogenesis of the periodontal diseases, and an introduction to modern rational periodontal therapy, including preventive, nonsurgical, and surgical methods. Topics include tissues of the periodontium, epidemiology of periodontal diseases, periodontal diseases, diseases prevention, disease treatment and management, drug therapy, immunology and host defense mechanisms, microorganisms associated with Periodontology, surgical and nonsurgical treatment, implantology and maintenance and periodontal emergencies and endodontic emergencies.

DHY 201 - Clinical Dental Hygiene II Lecture
2.00 Credits/2 Contact Hours
Prerequisite: DHY 111, DHY 110
Continues the development of student knowledge in treating patients and preventing oral disease. Topics include instrument sharpening, patient assessment, treatment planning, antimicrobial use, amalgam polishing/recontouring, pulp vitality testing, whitening, implant care, tobacco cessation, pit and fissure sealants and treatment of hypersensitivity.

DHY 202 - Clinical Dental Hygiene Lab II
4.00 Credits/ 12 Contact Hours
Prerequisite: DHY 111
Continues the development of student knowledge in treating patients and preventing oral disease. Topics include instrument sharpening, patient assisting, treatment planning, antimicrobial use, amalgam polishing/ recontouring, pulp vitality testing, whitening, implant care, tobacco cessation, pit and fissure sealants, and treatment of hypersensitivity.

DHY 205 - Oral Pathology
4.00 Credits/4 Contact Hours
Prerequisite: DHY 101, DHY 102
Introduces oral pathology, including 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, biopsy procedures, inflammation and repair, dental and mucosal anomalies, caries and pulpal pathology, odontogenic cysts, developmental cysts, odontogenic tumors, other tumors of oral structures, systemic diseases affecting the oral structures, infectious diseases, salivary gland pathology, disease of bone, blood dyscrasias, vesiculo-erosive and autoimmune diseases and syndromes and genetic diseases of the head and neck.

DHY 206 - Pharmacology and Pain Control
3.00 Credits/ 3 Contact Hours
Prerequisite: Regular status
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 terminology, pharmaceutical references, prescriptions and abbreviations, pharmacokinetics, drugs used in dentistry and their pharmacokinetics, drugs that may alter dental treatment and their pharmacokinetics, emergency drugs and drug abuse.

DHY 207 - Community Dental Health
4.00 Credits/6 Contact Hours
Prerequisite: DHY 111
Provides students with a broad understanding of the health care 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.

DHY 208 - Clinical Dental Hygiene III Lecture
2.00 Credits/2 Contact Hours
Prerequisite: DHY 201
Continues the development of student knowledge necessary for treatment and prevention of oral disease. Topics include ultrasonic/air polishing, scaling, debridement and root planning, oral irrigation and antimicrobial agents, dental health education, special needs patients, and ultrasonic and air polishing.

DHY 209 - Clinical Dental Hygiene III Lab
4.00 Credits/ 12 Contact Hours
Prerequisite: DHY 202
Continues the development of student skills necessary for treatment and prevention of oral disease. Topics include scaling, debridement and root planning, oral irrigation and antimicrobial agents, special needs patients and ultrasonics and air polishing.

DHY 212 - Nutrition
2.00 Credits/2 Contact Hours
Familiarizes students with the role of nutrition in the human body with an emphasis on the dental hygienist's role as a nutrition educator. Topics include nutritional aspects, nutritional disorders, and diet assessment.

DHY 213 - Clinical Dental Hygiene IV Lecture
2.00 Credits/2 Contact Hours
Prerequisite: DHY 208
Continues the development of student knowledge necessary for treatment and prevention of oral disease. Topics include PSR index, recare systems and special needs.

DHY 214 - Clinical Dental Hygiene IV Lab
4.00 Credits/12 Contact Hours
Prerequisite: DHY 209/Corequisite: DHY 200, DHY 205, DHY 206, DHY 207, DHY 212
Continues the development of student skills necessary for treatment and prevention of oral disease. Topics include PSR index, implementation of dietary assessment, recare systems, and applied techniques.

DHY 220 - Clinical Dental Hygiene V Lecture
2.00 Credits/2 Contact Hours
Prerequisite: DHY 213
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 of dental hygiene, dental ethical considerations, dental hygiene practice settings, and dentistry and dental hygiene regulation.

DHY 221 - Clinical Dental Hygiene V Lab
4.00 Credits/12 Contact Hours
Prerequisite: DHY 214
Continues the development of student skills necessary for treatment and prevention of oral disease. Topics include applied techniques.

DIS - Directed Independent Study

DIS 150 - Directed Independent Study
x.xx Credits/ xx Contact hours
This course provides the opportunity for students to apply theoretical knowledge in on-the-job situations.

ECE - Early Childhood Care and Education

ECE 101 - Introduction to Early Childhood Care and Education
5.00 Credit/ 5 contact hours
Prerequisite: Provisional admission
Introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives, career opportunities, work ethics, functioning in a team environment, transitional activities, program management, learning environment, cultural diversity, licensure and accreditation, and professional resource development file (portfolio) guidelines.

ECE 103 - Human Growth and Development I
5.00 Credit/ 5 contact hours
Prerequisite: Provisional admission
Introduces the student to the physical, social, emotional, and intellectual development of the young child (0 to 5 years of age). Provides for competency development in observing, recording, and interpreting growth and development stages in the young child. Topics include developmental characteristics, guidance techniques, developmentally appropriate practice, and introduction to children with special needs.

ECE 105 - Health, Safety and Nutrition
5.00 Credit/ 5 contact hours
Prerequisite: Provisional admission
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.

ECE 112 - Curriculum Development
3.00 Credit/ 5 contact hours
Prerequisite: ECE 101, ECE 103
Develops knowledge and skills that will enable the student to establish a learning environment appropriate for young children. Topics include instructional media, learning environments, curriculum approaches, development of curriculum plans and materials, community resources, transitional activities, approaches to teaching, learning, and assessing.

ECE 113 - Art for Children
3.00 Credit/ 5 contact hours
Prerequisite: ECE 101, ECE 103
Introduces the concepts related to creativity in art. This course combines lecture and lab experiences to introduce the many media areas used by children to express themselves. Topics include concepts of creativity; art media, methods, and materials for creative activities; planning and preparation of art lessons; appreciation of children's art processes and products; developmental stages in art; and aesthetic appreciation.

ECE 114 - Music and Movement
3.00 Credit/ 5 contact hours
Prerequisite: ECE 101, ECE 103
Introduces the concepts related to creativity in music and movement. This course combines lecture and lab experiences to introduce the developmental influences of music and movement; their social and emotional value; and media, methods, and materials used to foster musical activity and creative movement. Topics include spontaneous and planned music and movement; media, methods and material, and coordination of movement and music; developmental stages of music; music appreciation.

ECE 115 - Language Arts and Literature
5.00 Credit/ 5 contact hours
Prerequisite/Corequisite: Program admission level language and reading competency and ECE 101, ECE 103
Develops knowledge and skills that will enable the student to plan and implement appropriate listening, speaking, pre-writing, and reading readiness activities for young children. Topics include reading readiness, oral communication activities, writing readiness, listening comprehension, literature selection, story presentation and stages of language acquisition.

ECE 116 - Math and Science
5.00 Credit/ 5 contact hours
Prerequisite/Corequisite: Program admission level math achievement and ECE 101, ECE103
Presents the process of introducing science and math concepts to young children. Includes planning and implementation of appropriate activities and development of methods and techniques of delivery. Topics include cognitive stages and developmental process in math and science, math and science activity planning, development of math and science materials.

ECE 121 - Early Childhood Care and Education Practicum I
3.00 Credits/ 7 Contact hours
Prerequisite: Dept. approval and ECE 101, ECE 103
Provides the student with the opportunity to gain a supervised experience in an actual or simulated work setting allowing demonstration of techniques obtained from course work. Practicum training topics include: good work habits, supervised planning, interaction with children, parents, and co-workers, application of guidance techniques, classroom management, and documentation of child's development.

ECE 122 - Early Childhood Care and Education Practicum II
3.00 Credits/7 Contact hours
Prerequisite: Dept. approval and ECE 112, ECE 121
Provides the student with the opportunity to gain additional supervised experience in an actual or simulated work setting allowing demonstration of techniques obtained from course work. The course will emphasize planning and implementation of activities and physical, social, emotional, and cognitive development of the child. Practicum training topics include: good work habits, application of guidance techniques, human relations, program planning, and classroom management.

ECE 132 - Infant/Toddler Development
5.00 Credit/5 contact hours
Prerequisite: Provisional admission
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.

ECE 134 - Infant/Toddler Group Care
5.00 Credit/5 contact hours
Prerequisite: Provisional admission
Provides the knowledge, skills and attitudes necessary to meet the fundamental needs of children from birth the 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.

ECE 201 – Exceptionalities
5.00 Credit/5 contact hours
Prerequisite: Program admission level language and reading competency and ECE 101, ECE 103
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 special needs persons. Topics include inclusion/least restrictive environment (LRE), physical disabilities and health disorders, intellectual exceptionalities, social/emotional disorders, and community resources.

ECE 202 - Social Issues and Family Involvement
5.00 Credits/5 Contact hours
Prerequisites: Provisional admission
Enables the student to become familiar with the social issues that affect families of today and to develop a plan for coping with these issues as they occur in the occupational environment. Students are introduced to local programs and agencies that offer services to those in need. Topics include professional responsibilities, family/social issues, community resources, parent education and support, teacher-parent communication, community partnerships, social diversity and anti-bias issues, transitioning the child, and school family activities.

ECE 203 - Human Growth and Development II
5.00 Credit/5 contact hours
Prerequisite: Program Admission level language and reading competency and ECE 101, ECE 103
Introduces the student to the physical, social, emotional, and intellectual development of the school age child (6 to 12 years of age). Provides learning experiences related to the principles of human growth and development, and theories of learning and behavior. Topics include developmental characteristics, guidance techniques, developmentally appropriate practice, introduction to children with special needs, and observation skills.

ECE 211 - Methods and Materials
5.00 Credit/5 contact hours
Prerequisite: Regular status and ECE 112
Develops skills to enable the student to work as a paraprofessional in a program for pre-kindergarten through elementary aged children. Topics include instructional techniques, curriculum, materials for instruction, and learning environments.

ECE 212 Professional Practices
5.00 Credit/5 contact hours
Prerequisite: Departmental approval and ECE 211
Develops skills and knowledge of professional practices applicable to programs for pre-kindergarten and school-aged children. Topics include professional qualifications and professionalism.

ECE 224 - Early Childhood Care and Education Internship
12.00 Credits/36 Contact hours
Prerequisites: Departmental approval
Provides the student with the opportunity to gain experience in a simulated or actual work setting. Students will be placed in an approved setting(s) throughout the quarter where planning, implementing, observing, and evaluating activities are the focus of their involvement. An evaluation procedure will be used by the designee of the institution and the on-site supervisor to critique the student's performance. Topics include: problem solving, use of proper interpersonal skills, application of developmentally appropriate practice, professional development and resource file (portfolio) development.

ECO - Economics

ECO 191 - Principles of Economics
5.00 Credits/5 Contact hours
Prerequisite: Regular Status
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 the United States economy in perspective.

ELC - Electronics

ELC 104 - Soldering Technology I
2.00 Credits/3 Contact hours
Prerequisite: Provisional admission
Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topic include safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

ELC 108 - Direct Current Circuits II
4.00 Credits/5 Contact hours
Prerequisite: IFC 101; MAT 103 (diploma) or MAT 191 (degree)
Continues direct current (DC) concepts and applications. Topics include complex series/parallel circuits and DC theorems.

ELC 110 - Alternating Current II
4.00 Credits/5 Contact hours
Prerequisite: IFC 102
Continues development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and oscilloscopes. Topics include reactive components, simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

ELC 115 - Solid State Devices II
4.00 Credits/5 Contact hours
Prerequisite: IFC 103
Continues the exploration of the physical characteristics and applications of solid state devices. Topics include bipolar junction theory, bipolar junction application, and field effect transistors.

ELC 117 - Linear Integrated Circuits
4.00 Credits/5 Contact hours
Prerequisite: ELC 115
Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include operational amplifiers, timers, and three-terminal voltage regulators.

ELC 118 - Digital Electronics I
4.00 Credits/5 Contact hours
Prerequisite: IFC 103
Introduces the basic building blocks of digital circuits. Topics include binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment.

ELC 119 - Digital Electronics II
4.00 Credits/10 Contact hours
Prerequisite: ELC 118
Uses the concepts developed in Digital Electronics I as a foundation for the study of more advanced devices and circuits. Topics include flip-flops, counters, multiplexers and demultiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions.

ELC 120 - Microprocessor Fundamentals
4.00 Credits/5 Contact hours
Prerequisite: ELC 119
This course is designed to provide the student with a basic understanding of microprocessor and microcontroller operation, programming, interfacing, interrupts, and troubleshooting. The choice of microprocessor and microcontroller used in the lab experiences and illustration of basic operation is not important. The main objective of the course is to give the student a basic understanding of microprocessor operation and applications.

ELC 123 - Communications Electronic Survey
7.00 Credits/10 Contact hours
Prerequisite/Corequisite: ELC 115
Introduces the fundamental concepts and devices used in electronics communications. Topics include transmission, modulation and detection, receivers, transmitters, propagation, antennas, and deterioration.

ELC 124 - Industrial Electronics Survey
4.00 Credits/5 Contact hours
Prerequisite/Corequisite: ELC 120
Introduces the fundamental concepts and technologies utilized in industrial electronics applications. Topics include process controls, sensors, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

ELC 211 - Process Control
6.00 Credits/8 Contact hours
Prerequisites: ELC 120
Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

ELC 212 - Motor Controls
6.00 Credits/8 Contact hours
Prerequisites: ELC 115
Introduces the application of motor controls in the industrial environment. Topics include AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

ELC 213 - Programmable Controllers
5.00 Credits/ 7 Contact hours
Prerequisite: ELC 120 or advisor approval
Provides the basic skills and techniques used in industrial application of programmable controls. Topics include controller hardware, programming, PC applications, and troubleshooting.

ELC 214 - Mechanical Devices
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: MAT 105 (diploma) or MAT 194 (degree)
Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include linkages, motion analysis, gear drives, and preventative maintenance.

ELC 215 - Fluid Power
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: MAT 105 (diploma) or MAT 194 (degree)
Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

ELC 216 - Robotics
2.00 Credits/3 Contact hours
Prerequisite: ELC 213, ELC 214, ELC 215
Explores robotic concepts, terminology, and basic applications. Emphasis is placed on programming in robotic languages and robot/human interfacing safety practices. Topics include safety, terminology, languages, and programming.

ELC 217 - Computer Hardware
7.00 Credits/10 Contact hours
Prerequisite: ELC 120
Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

ELC 218 - Operating Systems Technologies
7.00 Credits/10 Contact hours
Prerequisite: ELC 217
Provides an introduction to the fundamentals of Command Line Prompt, Windows 9x, Windows 2000, and future operating systems. Topics include operating system fundamentals; installing, configuration, and upgrading; diagnosing and troubleshooting; and networks.

ELC 219 - Networking I
4.00 Credits/6 Contact hours
Prerequisite: ELC 120
Provides an introduction to networking technologies. Cover a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and Wan technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

ELC 229 - Security Systems
4.00 Credits/5 Contact hours
Prerequisite: ELT 106
Provides an in-depth study of electronic devices designed to detect environmental changes that indicate a threat to property security. Topics include sensor theory, low-voltage license regulations, system components, and system installation and service.

ELC 259 - Fiber Optics Systems
4.00 Credits/5 Contact hours
Prerequisite: ELC 119
Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics include fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

ELC 260 - Telecommunications and Data Cabling
4.00 Credits/5 Contact hours
Prerequisite: ELC 119
Introduces the basics of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

ELC 261 - Telecommunications Systems Installation and Programming
3.00 Credits/5 Contact hours
Prerequisite: ELC 260
Teaches the installation, programming, testing, and repair of simple and complex telephone systems. Laboratory activities give practical hands-on experience with various telephone systems. Topics include multi-line system installation, system programming, peripheral devices, and customer relations.

ELC 262 - Telecommunications and Data Transmission Concepts
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: ELC 261
Provides an introduction to basic concepts on telecommunication and data transmission. Topics include introduction to frequency and bandwidth, delineation of signal types and characteristics, methods of modulation and detection, transmission modes, characteristics of transmission media, measuring transmission signals, noise and distortion levels, multiplexing and emerging technologies.

ELC 286 - CompTIA A+ Certification
7.00 Credits/10 Contact hours
Prerequisites: SCT 100
Provides the necessary training to meet the CompTIA (Computer Technology Industry Association) A+ certification requirements. Course covers the CORE and DOS objectives necessary to pass the A+ requirements. Topics include identifying components and their functions, safety, installation procedures, troubleshooting techniques, and preventive maintenance.

ELT - Electrical Technology

ELT 106 - Electrical Prints, Schematics, and Symbols
4.00 Credits/5 Contact hours
Prerequisite: IFC 100, IFC 101
Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include electrical symbols, component identification, and print reading.

ELT 107 - Commercial Wiring I
5.00 Credits/7 Contact hours
Prerequisite: ELT 121, ELT 106, IFC 100
Introduces commercial wiring practices and procedures. Topics include National Electrical Code, commercial load calculations, and safety.

ELT 108 - Commercial Wiring II
5.00 Credits/7 Contact hours
Prerequisite: ELT 107
Presents the study of three-phase power systems, fundamentals of AC motor control, and the basic transformer connections. Topics include three-phase power systems, fundamentals of AC motor control, and transformer connections (single-phase and three-phase step down).

ELT 109 - Commercial Wiring III
5.00 Credits/7 Contact hours
Prerequisite/Corequisite: ELT 107, ELT 108
Presents the theory and practical application of conduit installation, system design, and related safety requirements. Topics include conduit installation, system design concepts, and safety procedures.

ELT 110 - State License Preparation
7.00 Credits/ 15 Contact hours
Prerequisite: MAT 101, ELT 106
Provides the student with the rules and regulations they must use while working with electricity. Topics include general knowledge, wiring protection, wiring method and material, equipment for general use, special occupancies, special equipment, special condition, and tables.

ELT 111 - Single-Phase/Three-Phase Motors
5.00 Credits/7 Contact hours
Prerequisite: ELT 109
Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include motor theory/operating principles, motor terminology, motor identification, National Electrical Manufacturers Association (NEMA) standards, motor efficiencies, preventive maintenance, troubleshooting/ failure analysis, and NEC requirements.

ELT 112 - Variable Speed/Low Voltage Controls
3.00 Credits/5 Contact hours
Prerequisite/Corequisite: ELT 111
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.

ELT 115 - Diagnostic Troubleshooting
3.00 Credits / 7 Contact Hours
Prerequisite: Advisor approval
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.

ELT 116 - Transformers
4.00 Credits / 6 Contact Hours
Prerequisite: ELT 119, IFC 100
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.

ELT 117 - National Electrical Code Industrial Applications
4.00 Credits / 7 Contact Hours
Prerequisite: ELT 109
Provides instruction in industrial applications of the National Electrical Code. Topics include rigid conduit installation, systems design concepts, equipment installation (600 volts or less), and safety precautions.

ELT 118 - Electrical Controls
5.00 Credits/ 8 Contact hours
Corerequisite: ELT 108, ELT 111, ELT 112
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, operation, application and ladder diagrams, AC and DC servo drives, and DC stepper drives. Topics include ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls.

ELT 119 - Electricity Principles II
4.00 Credits/5 Contact hours
Prerequisite: IFC 100 /Corequisite: IFC 101, MAT 101
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.

ELT 120 - Residential Wiring I
5.00 Credits/8 Contact hours
Prerequisite: IFC 100 /Corequisites: ELT 106, ELT 119, ELT 121, IFC 101
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 and receptacle installation including bonding, GFCI and AFCi circuits, special purposes outlets- ranges, cooktops, ovens, dryers, water heaters, sump pumps, etc., and sizing OCPD's (circuit breakers and fuses).

ELT 121 - Residential Wiring II
6.00 Credits/8 Contact hours
Prerequisite/Corequisite: ELT 120
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.

ELT 122 - Industrial PLC's
6.00 Credits/10 Contact hours
Prerequisite: ELT 111, ELT 112, ELT 118
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 set up, PLC programming basics, relay logic instructions, timers and counters, connecting field devices to I/O cards, and PLC safety procedures.

EMP - Employability Skills

EMP 100 - Interpersonal Relations and Professional Development
3.00 Credits/3 Contact Hours
Prerequisite: Provisional admission
Provides a study of 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 relation skills, job acquisition skills, job retention skills, job advancement skills, and professional image skills.

EMS - Paramedic Technology

EMC 100 Introduction to the EMT Profession
3.00 Credits/3 Contact hours
Prerequisite: Regular status
The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 Standard, Module 1 and Module 7. It also covers Sections 1, 2, 3 and 4 of the NHTSA, National Standard Curriculum, EMT-Intermediate-1985. Topics include basic cardiopulmonary resuscitation/AED, introduction to emergency medical care, roles and responsibilities of the EMT-Intermediate, EMS Systems for EMT-Intermediates, well being of the EMT– Basic, medical/legal and ethical issues, medical-legal aspects for the EMT-Intermediate, blood and airborne pathogens and infectious diseases, the human body, medical terminology, base line vital signs and SAMPLE history, lifting and moving patients, ambulance operations, gaining access, and overviews of HazMat/MCI.

EMC 103– Patient Assessment and Airway for the EMT
3.00 Credits/3 Contact hours
Corerequisite: EMC 100
The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, Module 2 and 3. In addition to the NSC-B 1994 standards, this course also includes the NSC EMT-Intermediate 1985 Standard, Sections 5, 6, and 7. Topics include scene-size up, initial assessment, focused history & physical exam for both medical and trauma patients, detailed physical exam, on-going assessment, communications/documentation, EMS communications for the EMT-I, airway, advanced airway and basic/advanced airway management.

EMC 105– Medical/Behavioral & OB/Pediatric Emergencies for the EMT
4.00 Credits/4 Contact hours
Prerequisites: EMC 100, EMC 103
The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, Module 4 and Module 6. Topics include general pharmacology, respiratory emergencies, cardiovascular emergencies, diabetic emergencies, allergic reactions, poisoning/overdose emergencies, environmental emergencies, behavioral emergencies, ob/gyn emergencies, infants & children and patients with special needs.

EMC 108- Trauma Emergencies and WMD Response
2.00 Credits/2 Contact hours
Prerequisite: EMC 100, EMC 103/
Corequisite: EMC 105
The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, Module 5. Topics Include bleeding and shock, soft tissue injuries, musculoskeletal care, injuries to the head/spine and emergency medical response to WMD.

EMC 110– Summative Evaluations for the EMT-Basic
5.00 Credits/5 Contact hours
Prerequisite: EMC 100, EMC 103/
Corequisite: EMC 105, EMC 108
The course serves as the exit point for students taking only the EMT-Basic program. Students continuing on to the EMT-Intermediate portion of the curriculum, must pass this course in order to continue. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This class will also contain a Comprehensive review of the US DOT EMT-Basic 1994 Curriculum, as well as portions of the NSC EMT-Intermediate 1985 Curriculum that were covered in EMS XX1 and EMS XX2, and a comprehensive written and practical exam that will serve to verify the students competencies before proceeding to the EMT-Intermediate Courses.

EMC 113 Pharmacology and Shock/Trauma Management for the EMT-Intermediate
3.00 Credits/3 Contact hours
Prerequisite: EMC 100, EMC 103, EMC 105,
EMC 108/Corequisite: EMC 110
The course covers Section 8 of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Intermediate, 1985 standard. Topics Include general pharmacology review, IV and IO therapy and shock/trauma assessment and management.

EMC 116 Hazardous Materials, Vehicle Extrication Process, Patient Assessment/ Initial Management
3.00 Credits/3 Contact hours
Prerequisite: EMC 113
This course covers the U.S. Department of Transportation 1985 Emergency Medical Technician - Intermediate Curriculum. Topics include: hazardous material awareness level I (GEMA), patient handling (FTO), vehicle extrication lab (FTO) and general patient assessment and initial management.

EMC 119 Summative Evaluations for the EMT-Intermediate
2.00 Credits/2 Contact hours
Prerequisite: EMC 113/Corequisite: EMC 116
This is the final course for those pursuing EMT-Intermediate Certification. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This class will also contain a Comprehensive review of the US DOT EMT-Basic 1994 Curriculum as well as the US DOT EMT-Intermediate 1985 Curriculum. The course will include a comprehensive written and practical exam that will serve to verify the students' competencies before being allowed to sit for the National Registry Intermediate-1985 Exam. Topics will include review of both the EMT-B 1994 and EMT-I 1985 Curricula, Assessment/Management Review for Trauma & Medical & OB/Peds and a NREMT examination review.

EMS 126 - Introduction to the Paramedic Profession
3.00 Credits/4 Contact hours
Prerequisite: Regular status/
Corequisite: ENG 101, MAT 101, AHS 101, SCT 100
Introduces the student to the paramedic profession. Discussion centers on functions that extend beyond the EMT scope of practice. Topics include the EMS system/roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical/legal considerations, ethics, ambulance operations, medical incident command, rescue awareness/operations, hazardous materials incidents and crime scene awareness. This course provides instruction on topics in Division 1, Sections 1-5, Division 7, Section 1 and Division 8 sections 1-5 of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 127 - Patient Assessment
4.00 Credits/5 Contact hours
Prerequisite: None/Corequisite: AHS 101, EMS 128
Introduces the fundamental principles and skills involved in assessing the pre-hospital patient. Emphasis is on the systematic approach to patient assessment, with adaptations for the medical versus the trauma patient. Topics include therapeutic communications, history taking, techniques of physical exam, patient assessment, clinical decision-making, EMS communications, and documentation. This course provides instruction on topics in Division 1, Section 9 and Division 3, Sections 1-9 of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 128 - Applied Physiology and Pathophysiology
3.00 Credits/3 Contact hours
Prerequisite: AHS 101
This course introduces the concepts of pathophysiology as it correlates to disease processes. This course will enable caregivers to enhance their overall assessment and management skills. Disease-specific pathophysiology is covered in each related section of the curriculum. This course covers a review of cellular composition and function, including cellular environment as it relates to fluid and acid-base balances. Content on genetics and familial diseases are discussed. Hypoperfusion, including various forms of shock, multiple organ dysfunction syndrome and cellular metabolism impairment are integral components of this course. The next portion of this section provides information on the body's self-defense mechanisms, the inflammatory response, and variances in immunity. The last topic covered is stress and disease, which includes stress responses and the interrelationships among stress, coping, and disease.

EMS 129 - Pharmacology
4.00 Credits/5 Contact hours
Prerequisite: Regular status/
Corequisite: ENG 101, MAT 101, SCT 100
This unit is designed to help the paramedic implement a patient management plan based on principles and applications of pharmacology. Discussion of pharmacology includes identification of drugs, drug calculations, drug administration techniques and procedures and drug safety and standards.

EMS 130 - Respiratory Emergencies
5.00 Credits/6 Contact hours
Prerequisite: AHS 101, EMS126, EMS127, EMS128, EMS129
This unit is designed to help the paramedic assess and treat a wide variety of respiratory related illnesses in the pediatric and adult patient. Topics include a review of anatomy and physiology, pathophysiology of foreign body airway obstruction, recognition of respiratory compromise, use of airway adjunctive equipment and procedures, current therapeutic modalities for bronchial asthma, chronic bronchitis, emphysema, spontaneous pneumothorax, and hyperventilation syndromes. This section also provides expanded information for adult respiratory distress syndrome, pulmonary thromboembolism, neoplasms of the lung, pneumonia, emphysema, pulmonary edema, and respiratory infections. This course provides instruction on topics in Division 2 (Airway), Section 1 (Airway Management and Ventilation) and Division 5 (Medical), Section 1 (Respiratory) of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 131 - Trauma
5.00 Credits/6 Contact hours
Prerequisite: EMS 126, EMS 127, EMS 128, EMS 129
This unit is designed to introduce the student to assessment and management of the trauma patient, to include: systematic approach to the assessment and management of trauma, demonstration of the assessment and management of certain types of trauma patients and bodily injuries. Student should complete the requirements for the Basic Trauma Life Support Course or the Pre-Hospital Trauma Life Support Course.

EMS 132 - Cardiology I
5.00 Credits/6 Contact hours
Prerequisite: EMS, 126, EMS127, EMS 128 EMS 129/Corequisite: ENG 101,SCT 100, EMS 132 EMS 200
Emphasizes the study of the cardiovascular system. Cardiology I will introduce and explore cardiovascular epidemiology, anatomy and physiology, pathophysiology, and electrophysiology. This course will also provide instruction on initial cardiovascular assessment, focused history, detailed physical examination, and electrocardiographic monitoring. Management of the cardiovascular patient will be taught in Cardiology II. At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with cardiovascular disease. This course provides instruction on topics in Division 5 (Medical), Section 2 (Cardiology) of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 133 - Cardiology II
5.00 Credits/6 Contact hours
Prerequisite: EMS 126, EMS 127, EMS 128, EMS 129/
Corequisite: ENG 101,SCT 100,EMS 132, EMS 200
This course expounds on the objectives in Cardiology I emphasizing advanced patient assessment and management of the cardiac patient. Topics will include advanced cardiovascular assessment, pharmacological intervention, electrical intervention, and emergency resuscitative treatment utilizing the American Heart Association's Advanced Cardiac Life Support (ACLS) Providers course. This course provides instruction on topics in Division 5 (Medical), Section 2 (Cardiology) of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 134 - Medical Emergencies
4.00 Credits/5 Contact hours
Prerequisite: AHS 101, EMS 126, EMS 127, EMS 128, EMS 129
Provides an in-depth study of the nervous, endocrine, gastrointestinal, renal, hematopoietic, and immune systems. Topics include epidemiology, pathophysiology, assessment, and management of specific injuries/illnesses. Emphasis is placed on allergies/anaphylaxis, toxicology, environmental emergencies, and infectious and communicable diseases. General/specific pathophysiology assessment and management are discussed in detail for environmental emergencies. Infectious and communicable disease topics include public health principles, public health agencies, infection, pathogenicity, infectious agents, and specific infectious disease processes and their management. This course provides instruction on topics in Division 5 (Medical), Sections 3, 4, 5, 6, 7, 8, 9, 10, and 11 of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 135 - Maternal/Pediatric
5.00 Credits/6 Contact hours
Prerequisite: EMS 126, EMS 127, EMS 128, EMS 129
Emphasizes the study of gynecological, obstetrical, pediatric and neonatal emergencies. Maternal/Child combines the unique relationships and situations encountered with mother and child. Provides a detailed understanding of anatomy/physiology, pathophysiology, assessment, and treatment priorities for the OB/GYN patient. Pediatric and neonatal growth and development, anatomy and physiology, pathophysiology, assessment and treatment specifics are covered in detail. Successful completion of a PLS/PALS course is required. This course provides instruction on topics in Division's 5 (Medical), Sections 13 (Obstetrics) & 14 (Gynecology) and 6 (Special Considerations), Sections 1 (Neonatology) and 2 (Pediatrics) of the USDOT/NHTSA Paramedic National Standard Curriculum.

EMS 136 - Special Patients
2.00 Credits/3 Contact hours
Prerequisite: EMS 126, EMS 127, EMS 128, EMS 129
Provides an overview of the assessment and management of behavioral emergencies as they pertain to prehospital care. Topics include communication skills and crisis intervention, assessment and management of the adult and adolescent patient with behavioral emergencies, management of the violent patient, management of the suicidal patient, medical/legal considerations, and stress management. Life span, geriatrics, abuse, special challenges, and chronic care patients are included.

EMS 200 Clinical Application of Advanced Emergency Care
10.00 Credits/30 Contact hours
P. Lab/O.B.I. 300
Prerequisite: Regular status
Prerequisite/Corequisite: AHS 101, EMS 126, EMS 127, EMS 128, EMS 129, EMS 130, EMS 131, EMS 132, EMS 133, EMS 134,EMS 135, EMS 136
This course provides a range of clinical experiences for the student paramedic to include clinical application of advanced emergency care.

EMS 201 - Summative Evaluation
5.00 Credits/6 Contact hours
Prerequisite: Regular status
Corequisite: ENG 101, SCT 100
Provides supervised clinical experience in the hospital and prehospital advanced life support settings to include: EMS leadership, summative case evaluations and EKG interpretation. This course also includes a comprehensive paramedic program examination and a board examination review.

ENG - English

ENG 097 - English III
5.00 Credits/5 Contact hours
Prerequisite: ENG 096 or entrance English score in accordance with approved DTAE admission score level
Emphasizes the rules of grammar, punctuation, and spelling in order to ensure a smooth transition into communicating orally and in writing. Topics include basic grammar review, use of punctuation, use of capitalization, recognition of clauses and phrases, spelling, writing sentences, and writing simple paragraphs.

ENG 098 - English IV
5.00 Credits/5 Contact hours
Prerequisites: ENG 097, or entrance English score in accordance with approved DTAE admission score levels.
Emphasizes the ability to communicate using written and oral methods. Topics include basic paragraph construction, proofreading, written reports, and oral reports.

ENG 101 - English
5.00 Credits/5 Contact hours
Prerequisite: ENG 097 and RDG 097 or entrance English and reading scores in accordance with approved DTAE admission score levels.
Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing techniques used in selected readings, writing practice, editing and proofreading, research skills, and oral presentation skills. Homework assignments reinforce classroom learning.

*ENG 111 - Business English
5.00 Credits/5 Contact hours
Prerequisite: ENG 097 and RDG 097 or entrance English and reading scores in accordance with approved DTAE admission score levels
Emphasizes a functional and comprehensive review of English usage. Topics include English grammar and sentence structure and composition fundamentals.

ENG 112 - Business Communications
5.00 Credits/5 Contact hours
Prerequisites: BUS 101, ENG 111with a grade of *C* or better
Provides knowledge and application of written and oral communications found in business situations. Topics include writing fundamentals and speaking fundamentals.

ENG 191 - Composition and Rhetoric
5.00 Credits/5 Contact hours
Prerequisite: Degree program admission level language competency, or ENG 098 (RDG 098 suggested)
Focuses on skills required for effective writing in a variety of contexts, with emphasis on exposition, analysis, and argumentation, including introductory use of a variety of research skills; explores the analysis of expository essays and creative nonfiction about issues in the humanities and in society. The course includes a review of grammar and stylistic usage in proofreading and editing, with emphasis on the rhetorical function of these mechanics. Topics include writing analysis and practice, revision, and research.

ENG 193 – Literature and Composition
5.00 Credits/5 Contact hours
Prerequisite: ENG 191 with a grade of *C* or better
Develops writing skills beyond the levels of proficiency required by ENG 191, emphasizes interpretation and evaluation, and incorporates a variety of more advanced research methods; emphasizes the student's ability to read literature and literary criticism analytically and meaningfully and to communicate that information clearly. Students analyze, critically interpret, and evaluate the form and content of a range of literary texts and practice various strategies of writing. Topics include reading and analysis of fiction, poetry, and drama; advanced research methods; and writing about literature.

ENG 195 - Technical Communications
5.00 Credits/5 Contact hours
Prerequisite: ENG 191 with a grade of *C* or better
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 oral technical report presentation.

HUM - Humanities

HUM 191 - Introduction to Humanities
5.00 Credits/5 Contact Hours
Prerequisite: ENG 191 with grade of *C* or better
Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities are presented as a source of subjective insights for the understanding of people and society. Topics include historical and cultural developments and contributions of the humanities.

IDS - Industrial Systems Technology

IDS 215 - Industrial Mechanics
6.00 Credit/ 10 contact hours
Prerequisite: Program admission level math achievement
Provides instruction in basic physics concepts applicable to mechanics of industrial production equipment, and teaches basic industrial application of mechanical principles with emphasis on power transmission and specific mechanical components. Topics include mechanical tools, fasteners, basic mechanics, lubrication, bearings, and packings and seals.

IDS 221 - Industrial Fluidpower
7.00 Credit/ 10 contact hours
Prerequisite: Program admission level math achievement
Provides instruction in fundamental concepts and theories for safely operating hydraulic components and pneumatic systems. Topics include hydraulic theory, suction side of pumps, actuators, valves, pumps/ motors, accumulators, symbols and circuitry, fluids, filters, pneumatic theory, compressors, pneumatic valves, air motors and cylinders, and safety.

IFC - Industrial Fundamental Core

IFC 100 - Industrial Safety Procedures
2.00 Credits/3 Contact hours
Prerequisite: Provisional admission
Provides in-depth study of the health and safety practices required for maintenance of industrial production equipment. Topics include introduction to OSHA regulations, safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

IFC 101 - Direct Current Circuits I
4.00 Credits/5 Contact hours
Prerequisite: MAT 101 (out of program students)/
Corequisite: MAT 103 (diploma), or MAT 191(degree)
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.

IFC 102 - Alternating Current I
4.00 Credits/5 Contact hours
Prerequisite: IFC 101
Prerequisite/Corequisite: MAT 105 (diploma) or MAT 194 (degree)
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.

IFC 103 - Solid State Devices I
4.00 Credits/5 Contact hours
Prerequisite/Corequisite: IFC 102
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.

MAS - Medical Assisting

MAS 101 - Legal Aspects of the Medical Office
2.00 Credits/2 Contact hours
Prerequisite: Program Admission
Corequisite: MAS 113, MAS 109, MAS115
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, and medical office in litigation, ethics and bioethical issues.

MAS 103 - Pharmacology
5.00 Credits/5 Contact hours
Prerequisite: Program Admission
Corequisite: MAS 108, MAS 112, MAS114
Introduces drug therapy with emphasis on safety, classification of drugs, their action, side effects, and/or adverse reactions. Also introduces the basic concept of mathematics used in the administration of drugs. Topics include introduction to pharmacology, calculation of dosages, sources and forms of drugs, drug classification, and drug effects on the body systems. Principles of infusion therapy and laboratory application of infusion are optional.

MAS 108 - Medical Assisting Skills I
5.00 Credits/10 Contact hours
Prerequisite: Program Admission
Corequisite: AHS 103, MAS 112, MAS114
Introduces the skills necessary for assisting the physician with a complete history and physical in all types of 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, preparing patients/assisting physician with examinations and diagnostic procedures, vital signs/menstruation, minor office surgical procedures, and electrocardiograms.

MAS 109 - Medical Assisting Skills II
5.00 Credits/10 Contact hours
Prerequisite: MAS 108, MAS 112 and MAS 114/
Corequisite: MAS 101, MAS 113, MAS 115
Furthers the student's knowledge of the more complex activities in the physician's office. Topics include: collection/examination of specimens and CLIA regulations; urinalysis, venipuncture, hematology and chemistry evaluations; advanced reagent testing (Strept Test, HcG , etc), administration of medications; emergency procedures of the medical office, respiratory evaluations, rehabilitative therapy procedures; principles of radiology safety and emergency procedures of the medical office.

MAS 112 - Human Diseases
5.00 Credits/5 Contact hours
Prerequisite: Program Admission
Corequisite: MAT 103, MAS 108, MAS 114
Provides clear, succinct, and basic information about common medical conditions. Taking each body system, the disease condition is highlighted following a logical formation consisting of description, etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and prevention. Topics include introduction to disease and diseases of body systems, including the nutritional and pharmacological implications.

MAS 113 - Maternal and Child Care
5.00 Credits/5 Contact hours
Prerequisite: Program Admission
Corequisite: MAT 103, MAS 108, MAS 114
Focuses on the reproductive system, care of the mother in all stages of pregnancy, the normal and emotional growth of the healthy child, and care of the sick child. Topics include: introduction to obstetrics, female reproductive system, male reproductive system, intrauterine development, prenatal care, principles of specialized testing, labor and delivery, postpartum care, patient education, and methods of contraception.. Child development and common pathophysiology from newborn through adolescence.

MAS 114 - Medical Administrative Procedure I
3.00 Credits/5 Contact hours
Prerequisite: MAS 101, AHS 109, BUS 101
Emphasizes essential skills required for the typical medical office in the areas of computers and medical transcription. Topics include introduction to the computer and medical transcription.

MAS 115 - Medical Administrative Procedures II
3.00 Credits/6 Contact hours
Prerequisites: AHS 114
Emphasizes essential skills required for the typical medical office. Topics include accounting procedures and insurance preparation and coding.

MAS 117 - Medical Assisting Externship
8.00 Credits/24 Contact hours
Prerequisite: Completion of all required courses except MAS 118/Corequisite: MAS 118
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 situation at a professional level of technical application and requires concentration, practice, and follow-through. Topics include application of classroom knowledge and skills, functioning in the work environment, listening, and following directions.

MAS 118 - Medical Assisting Seminar
4.00 Credits/4 Contact hours
Prerequisite: Completion of all required courses except MAS 117/Corequisite: MAS 117
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.

MAT - Mathematics

MAT 097 - Mathematiacs III
5.00 Credits/5 Contact hours
Prerequisite: MAT 096 or entrance arithmetic score in accordance with approved DTAE admission score levels
Emphasizes in-depth arithmetic skills needed for the study of mathematics related to specific occupational programs and for the study of basic algebra. Topics include whole numbers, fractions, decimals, percents, measurement, geometry, and application problems.

MAT 098 - Elementary Algebra
5.00 Credits/5 Contact hours
Prerequisite: MAT 097 or entrance arithmetic score in accordance with approved DTAE admission score levels
This course provides instruction in basic algebra. Topics include introduction to real numbers and algebraic expressions, solving equations and inequalities, graphs of linear equations, polynomial operations, and polynomial factoring.

MAT 099 - Intermediate Algebra
5.00 Credits/5 Contact hours
Prerequisites: MAT 098 or entrance arithmetic score in accordance with approved DTAE admission score levels.
This course provides instruction in intermediate algebra. Topics include factoring, inequalities, rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

*MAT 101 - General Mathematics
5.00 Credits/5 Contact hours
Prerequisite: MAT 097 or DTAE arithmetic admission score levels
Emphasizes mathematical skills that can be applied to the solution of occupational and technical problems. Topics include properties of numbers, fractions, decimals, percents, ratio and proportion, measurement and conversion, exponents and radicals, and geometric and technical formulas. Class includes lectures, applications, and homework to reinforce learning.

*MAT 103 - Algebraic Concepts
5.00 Credits/5 Contact hours
Prerequisite: MAT 098 or entrance arithmetic and algebra scores in accordance with approved DTAE admission score levels
Introduces concepts and operations which can be applied to the study of algebra. Course content emphasizes: basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts. Class includes lecture, applications, and homework to reinforce learning.

MAT 105 - Trigonometry
5.00 Credits/5 Contact hours
Prerequisite: MAT 103 (with a grade of *C* or better)
Emphasizes trigonometric concepts. Introduces logarithms and exponential functions. Topics include geometric formulas, trigonometric concepts, and logarithms and exponentials.

*MAT 111 - Business Math
5.00 Credits/5 Contact hours
Prerequisite: MAT 097, or entrance arithmetic score in accordance with approved DTAE admission score levels
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 using electronic calculators (not to include the touch method).

MAT 190 - Mathematical Modeling
5.00 Credits/5 Contact Hours
Prerequisite: Degree program admission level math achievement
This course is designed as an alternative to College Algebra for those students who will not take Trigonometry, Precalculus, or Calculus. It is an applications-driven course that introduces functions using real-world phenomena as models. The major topics include: fundamental concepts of algebra; linear, quadratic, polynomial, exponential, and logarithmic functions and models of real-world phenomena; systems of equations; and additional topics in algebra.

MAT 191 - College Algebra
5.00 Credits/5 Contact hours
Prerequisite: Degree program admission level math achievement
Emphasizes techniques of problem solving using algebraic concepts. Topics include algebraic concepts and operations, linear and quadratic equations and functions, simultaneous equations, inequalities, exponents and powers, graphing techniques, and analytic geometry.

MAT 194 - Precalculus
5.00 Credits/5 Contact hours
Prerequisite: MAT 191 with *C* or better
This course prepares students for Calculus. he 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.

MCA - Advanced Machine Tool Technology

MCA 211 - CNC Fundamentals
7.00 Credits/ 9 Contact hours
Prerequisite: SCT 100
Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include math review, safety, jigs and fixtures, tooling and tool holders, reference points, tool offset, and program loading and editing.

MCA 213 - CNC Mill Manual Programming
7.00 Credits/10 Contact hours
Corequisite: MCA 211
Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines.Topics include machine safety, command codes, program loading, machine setup, process control, and practical application.

MCA 215 - CNC Lathe Manual Programming
8.00 Credits/12 Contact hours
Corequisite: MCA 211
Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) lathes. Topics include machine safety, command codes, program loading, machine setup, process control, and practical application.

MCA 217 - CNC Practical Applications
6.00 Credits/10 Contact hours
Corequisite: MCA 211, MCA 213, MCA 215
Provides instruction in specialty tooling and multi-axis machining. Students will also gain experience in process control. Topics include specialty tooling, EDM/ECM, multi-axis machining, process control, and laboratory practice.

MCA 219 - CAD/CAM Programming
7.00 Credits/11 Contact hours
Prerequisites/Corequisite: MCA 211
Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include hardware and software, digitizer, pen plotter, drawing manipulations, tool path generation, and program uploading and downloading.

MCH - Machine Tool Technology

MCH 101 - Introduction to Machine Tool
6.00 Credits/10 Contact hours
Prerequisite: Provisional admission
Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include use of hand and bench tools, use of power tools, analysis of measurements, saw and blade selection, feed and speeds determination, use of coolants, saw and blade maintenance, sawing operations, drilling setup and operation, ISO 9000, Deming's quality theory, quality goals and objectives, and coordinate measurement machines (CMM).

MCH 102 - Blueprint Reading for Machine Tool
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces the fundamental concepts necessary to interpret drawings and produce sketches for machine tool applications. Topics include interpretation of blueprints and sketching.

MCH 103 - Applied Measurement
5.00 Credits/5 Contact hours
Prerequisite/Corequisite: MAT 101
Develops skills necessary for the use and analysis of measurement of machine tool technology. Topics include: use of precision measuring instruments, and use of comparison gages, and analysis of measurements.

MCH 104 - Machine Tool Math I
5.00 Credits/5 Contact hours
Prerequisite/Corequisite: MAT 101
Develops mathematic competencies as applied to machine tool technology. This course emphasizes manipulation and use of machining formulas and the discussion of machining geometry. Topics include machining algebra and machining geometry.

MCH 105 - Machine Tool Math II
5.00 Credits/5 Contact hours
Prerequisite: MCH 104
Continues the development of mathematics competencies as applied to machine tool technology. Emphasis is placed on the uses of geometric and trigonometric principles in machining. Topics include advanced applied geometry and applied trigonometry.

MCH 107 - Characteristics of Metals/Heat Treatment
4.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces the properties of various metals, production methods, and identification of ferrous and nonferrous metals. Topics include metallurgy and heat treatment.

MCH 109 - Lathe Operations I
6.00 Credits/10 Contact hours
Prerequisite: Provisional admission
Provides opportunities for students to develop skill in the use of bench grinders and lathes. Topics include lathes, bench grinders, bench grinder operations, lathe calculation, lathe setup, and lathe operations.

MCH 110 - Lathe Operations II
6.00 Credits/10 Contact hours
Prerequisite: MCH 109
Provides further instruction for students to develop skill in the use of lathes. Topics include lathes, lathe setup, and operations.

MCH 112 - Surface Grinder Operations
3.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders. Topics include surface grinders and surface grinder maintenance, surface grinder setup, and surface grinder operations.

MCH 114 - Blueprint Reading II
5.00 Credits/5 Contact hours
Prerequisite/Corequisite: MCH 104
Continues the development of blueprint reading competencies as applied to machine tool technology. Topics include advanced sectioning, geometric dimensioning, geometric tolerancing, and assembly drawings.

MCH 115 - Mill Operations I
6.00 Credits/10 Contact hours
Prerequisite: Provisional admission
Provides instruction in the setup and use of the milling machine. Topics include milling machines, milling machine calculations, milling machine setup, and milling machine operations.

MCH 116 - Mill Operations II
6.00 Credits/10 Contact hours
Prerequisite: MCH 115
Provides further instruction for students to develop skills in the use of milling machines. Topics include vertical and horizontal mill calculations, vertical and horizontal mill setups, and vertical and horizontal mill operations.

MCH 118 - Computer/CNC Literacy
5.00 Credit/5 Contact hours
Prerequisites: Provisional Admission
Provides an introduction to the terminology and application of microcomputers and terminology associated with computer numerical controlled (CNC) equipment. Students will become familiar with the basic operations of computers and the capabilities and limitations of CNC machinery. Topics include: introduction to microcomputer concepts, basic microcomputer operations, functions and subroutines, machine tool applications, Cartesian coordinates, absolute and incremental programming, capabilities and limitations of CNC.

MCH 151 - Machine Tool Technology - Internship
5.00 Credits/15 Contact hours
Prerequisite/Corequisite: MCH 104
Provides practical work experience in an off-campus machine shop environment. This may be in a paid or non-paid setting, and provides practical hands-on experience while emphasizing continual professional self-improvement in areas such as time management, work attitude, following instructions, and overall work ethics. The internship is individualized to meet the goals of both the student and the employer.

MCH 152 - Industrial Machine Application
6.00 Credits / 10 Contact Hours
Prerequisite: MCH 110, MCH 112, MCH 116
Provides an opportunity to perform creative and critical thinking skills needed to fabricate, modify, and maintain complex machine assemblies. Emphasis is placed on bench work, lathe, mill, and grinder operations; tool selection; and sequencing fabrication operations. Topics include: job planning, preparation for machining operations, and machining operations.

MKT - Marketing Management

MKT 100 - Introduction to Marketing
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include marketing strategies, marketing mix, marketing trends, and dynamic forces affecting the markets.

MKT 101 - Principles of Management
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Develops skills and behaviors necessary for successful supervision of people and job responsibilities. Emphasis will be placed on personnel management, the basic supervisory functions, supervisory skills and techniques, and the special challenges and demands of supervising employees. Topics include management theories, including total quality management; motivation, supervision, and evaluation of employees; recruitment, screening, and selection of employees; supervision techniques; and functions of management.

MKT 103 - Business Law
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Introduces the study of contracts and other business obligations in the legal environment. Topics include creation and evolution of laws, court decision process, sales contracts, commercial papers, risk-bearing devices, and the Uniform Commercial Code.

MKT 104 - Principles of Economics
5.00 Credits/5 Contact hours
Prerequisite: Program admission level math achievement
Provides a study of micro- and macroeconomic principles, policies, and applications. Topics include supply and demand, money and the banking system, business cycle, and economic systems.

MKT 106 - Fundamentals of Selling
5.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Emphasizes sales strategy and techniques to assist the student in the sales process. Topics include customer relations, professional image, product/service knowledge, selling techniques and procedures, sales presentations, and ethics of selling.

MKT 108 - Advertising
4.00 Credits/5 Contact hours
Prerequisite: Regular status
Introduces the fundamental principles and practices associated with advertising activities. Topics include purposes of advertising; principles of advertising; budgeting; marketing and advertising plans; regulations and controls; media evaluation, target marketing, and selection; campaign planning; and trends in advertising.

MKT 109 - Visual Merchandising
4.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Focuses on the components of display necessary for the effective visual presentation of goods and services. Opportunities will be provided to utilize the principles and techniques that are common to display work in various types of businesses. Emphasis will be placed on design, color, tools and materials, and installation of displays. Topics include design principles; color principles, tools and materials of the trade, props and fixtures, lighting and signing, installation of displays, store planning, and safety.

MKT 110 - Entrepreneurship
8.00 Credits/10 Contact hours
Prerequisite: MKT 100, ENG 111 or advisor approval
Provides an overview of the activities that are involved in planning, establishing, and managing a small business enterprise. Topics include planning, location analysis, financing, and development of a business plan.

MKT 122 - Buying & Merchandising Management
5.00 Credits/5 Contact hours
Prerequisite: Regular status
Develops skills for the potential entrepreneur to effectively merchandise and manage a business. Topics include: principles of merchandising, traffic patterns, basic stock and inventory, inventory control, mark-ups and mark-downs, types of discounts and the fundamentals of buying.

MKT 123 - Small Business Management
5.00 Credits/5 Contact hours
Prerequisite: ACC 101, ENG 111, MAT 111 or advisor approval
Summarizes competencies included in the entrepreneurship specialization and provides opportunities for application and demonstration of skills. Topics include management principles, marketing functions, financial applications, and entrepreneurial growth potential.

MKT 130 - Marketing Administration O.B.I. I
3.00 Credits/10 Contact hours
Prerequisites: Regular Status, MKT 101, ENG 111 (diploma) or ENG 191 (degree)
Introduces the application and reinforcement of marketing administration 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 marketing administration applications on the job. Topics include problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing administration techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, required weekly seminar, and required practicum or on-the-job training.

MKT 131 - Marketing Administration O.B.I. II
3.00 Credits/10 Contact hours
Prerequisite/Corequisite: MKT 130
Focuses on the application and reinforcement of marketing administration 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 marketing administration applications on the job. Topics include problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing administration techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, required weekly seminar, and required practicum or on-the-job training.

MKT 170 - Sports and Entertainment Marketing
5.00 Credits/5 Contact hours
Prerequisites: Advisor approval
The purpose of Sports and Entertainment Marketing is to familiarize students with terminology associated with marketing these industries. Students will study marketing strategies for all aspects of the sports industry: amateur, college and professional. Students will also learn the specialized marketing techniques for the Entertainment industry. In addition, product development and legal issues will be discussed.

MKT 228 - Advanced Marketing
5.00 Credits/5 Contact hours
Prerequisite: Regular status
This course gives an in depth study of marketing research, consumer behavior, and Marketing management strategies in a complex global environment Topics include: marketing research, consumer behavior, strategic management competitive advantage, and market segmentation.

MKT 232 - Advanced Selling
4.00 Credits/5 Contact hours
Prerequisite: MKT 100 or instructor permission based upon experience
This course provides instruction in intermediate algebra. Topics include rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

MSD - Management and Supervisory Development

MSD 101 - Interpersonal Employee Relations
5.00 Credits / 5 Contact Hours
Prerequisite: Provisional admission
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.

MSD 103 - Leadership and Decision Making
5.00 Credits / 5 Contact Hours
Prerequisite: Provisional admission
Familiarizes the student with the principles and methods of sound leadership and decision-making. Topics include basic leadership principles and how to use them to solicit cooperation, use of leadership to develop the best possible senior-subordinate relationships, the various decision making processes, the ability to make sound and timely decisions, leadership within the framework of the major functions of management, and delegation of authority and responsibility.

MSD 106 - Counseling and Disciplinary Actions
5.00 Credits / 5 Contact Hours
Prerequisite: Provisional admission
Develops an understanding of the proper counseling and disciplinary techniques to use in various workplace situations. Topics include the approaches to counseling and when each technique is appropriate; the use of good interpersonal communications to make counseling more effective; how to recognize when counseling is needed; and handling disciplinary problems in a fair and impartial manner, counseling for discipline, common causes of disciplinary problems, and positive discipline.

NPT - Nursing Practicum

NPT 112 - Medical Surgical Nursing Practicum I
7.00 Credits/21 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NSG 112
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; client care, treatment, pharmacology, medication administration, and diet therapy related to the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; and standard precautions.

NPT 113 - Medical Surgical Nursing Practicum II
7.00 Credits/21 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110, NPT 112/Corequisite: NSG 113
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; client care, treatment, pharmacology, medication administration, and diet therapy related to the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; and standard precautions.

NPT 212 - Pediatric Nursing Practicum
2.00 Credits/6 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NPT 213, NSG 213, NSG 212
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the pediatric client; client care, treatment, pharmacology, medication administration, and diet therapy of the pediatric client; growth and development; and standard precautions.

NPT 213 - Obstetrical Nursing Practicum
3.00 Credits/9 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NPT 212, NSG 213, NSG 212
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, and providing client education. Topics include health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn; and standard precautions.

NPT 215 - Nursing Leadership Practicum
2.00 Credits/7 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NSG 215
Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market.Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group and other TQM processes, and conflict resolution.

NSG - Practical Nursing

NSG 110 - Nursing Fundamentals
10.00 Credits/17 Contact Hours
Prerequisite: AHS 101, AHS 104, ENG 101, MAT 101, PSY 101, acceptance into the Nursing program
An introduction to the nursing process. Topics include orientation to the profession; ethics and law; community health; 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; geriatrics; customer/client relationships; and standard precautions.

NSG 112 - Medical Surgical Nursing I
9.00 Credits/9 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NPT 112
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; client care, treatment, pharmacology, and diet therapy related to the cardiovascular respiratory, endocrine, urinary, and gastrointestinal systems; and standard precautions.

NSG 113 - Medical Surgical Nursing II
9.00 Credits/9 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110, NSG 112/Corequisite: NPT 113
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; client care, treatment, pharmacology, and diet therapy related to the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; and standard precautions.

NSG 212 - Pediatric Nursing
5.00 Credits/5 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110, NSG 112, NSG 113/Corequisite: NPT 213, NPT 212, NSG 213
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; and standard precautions.

NSG 213 - Obstetrical Nursing
5.00 Credits/5 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110
Corequisite: NPT 213, NPT 212, NSG 212
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, and providing client education. Topics include health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the reproductive system, obstetric clients, and the newborn; client care, treatments, pharmacology, and diet therapy related to the reproductive system, obstetric clients, and the newborn; and standard precautions.

NSG 215 – Nursing Leadership Practicum
2.00 Credits/2 Contact Hours
Prerequisite: AHS 102, AHS 103, AHS 109, NSG 110/
Corequisite: NPT 215
Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include application of the nursing process, critical thinking, supervisory skills, client education methods, group and other TQM processes, and conflict resolution.

NUR – Registered Nursing (ADN)

NUR 194 – Introduction to Nursing Practice
9.00 Credits/19 Contact Hours
This course introduces the associate degree nursing student to the client, nursing profession, and the healthcare delivery system. It introduces theoretical and historical content foundational to nursing practice. The nursing process is taught as the framework to organize and deliver nursing care. This course introduces the student to the roles of the professional nurse. Throughout the course, emphasis is placed on developing critical thinking, caring, competence, and fundamental nursing skills. Clinical opportunities are provided in the nursing laboratory and acute care settings.

NUR 195 – Adult Health I
9.00 Credits/19 Contact Hours
This course reinforces theory and fundamental nursing skills taught in Nursing I and introduces the student of the concepts of adult health nursing. The nursing process is used as a framework to organize content and deliver nursing care. Students use critical thinking as the basis for decisions regarding planning, interventions and evaluation when caring for clients with medical-surgical disorders. Pharmacological principles are integrated throughout the course. Simulated laboratory and clinical settings provide an opportunity to develop competency in nursing skills and caring in nursing practice. Clinical opportunities are provided in a variety of medical-surgical settings.

NUR 196 – Adult Health II
9.00 Credits/19 Contact Hours
This course focuses on providing competent care to clients within a variety of outpatient and specialty settings and includes an introduction to concepts and principles of case management, collaboration, and referral among community agencies. Application of the nursing process and critical thinking to concepts of mental health, chronic long-term illness, and the aging process is emphasized. Clinical opportunities are provided in inpatient and outpatient mental health, long-term care, outpatient rehabilitation, as well as but not limited to home health, hospice, and public health settings.

NUR 294 – Parent/Child Health
9.00 Credits/19 Contact Hours
This course focuses on the care of children, child-bearing women, and their families. Focus is placed on the nursing process, critical thinking, and caring in relation to concepts of family and child development from normal conception through adolescence and common, recurring pediatric illnesses. Pharmacological principles are integrated throughout the course. Students continue to focus on roles of the professional nurse as caregiver, manager of care, and member of the profession. Clinical opportunities are provided in the community and acute care settings.

NUR 295 – Adult Health III
9.00 Credits/19 Contact Hours
This course builds on Adult Health I and II and introduces the student to the concepts of advanced medical-surgical disorders in adult health nursing. In both simulated and clinical laboratory settings, the student applies the nursing process by demonstrating competency, caring, critical thinking, and decision-making skills for clients with severe to complex illnesses. Pharmacological principles are taught as they relate to the client. Clinical opportunities are provided in a variety of medical-surgical settings.

NUR 296 – Transitions to Professional Practice
9.00 Credits/21 Contact Hours
The focus of this course is to facilitate a transition into the role of professional nursing. Theoretical content focuses on leadership and management competencies necessary for assuming beginning leadership and/or management positions. Throughout the course, the student will have the opportunity to develop independence in caring for groups of clients. Students will explore current professional nursing issues. Emphasis is placed on professional growth, accountability, and responsibility. During the clinical practicum, students are expected to demonstrate competency, caring, critical thinking, and decision-making skills in the roles of provider of health care, manager of health care, and member of the nursing profession. Clinical opportunities are provided in a variety of acute care settings with an assigned registered nurse preceptor.

PHL - Phlebotomy

PHL 103 - Introduction to Venipuncture
4.00 Credits/5 Contact Hours
Prerequisite: AHS 101, AHS 109
Introduces blood collecting techniques and processing specimens.

PHL 105 - Clinical Practice
8.00 Credits/24 Contact Hours
Prerequisite: PHL 103, AHS 104, SCT 100
The student will spend 8 hours a day for 6 or 8 weeks in an approved clinical affiliate. The student will perform venipuncture duties.

PCT - Patient Care Technician

PCT 100 - Technical Skills for PCT
8.00 Credits/ 11 Contact Hours
Prerequisite: CNA 100
Corequisite: AHS 101, AHS 103
Provides education and training to prepare students to function under the direction of a licensed health professional to perform non-licensed technical patient care skills in a hospital, physicians practice, and other settings. Topics include phlebotomy, wound care, EKG lead placement, respiratory care, and various other post- procedure assessments.

PSY - Psychology

PSY 101 - Basic Psychology
5.00 Credits/5 Contact Hours
Prerequisite: Provisional admission
Presents the basic principles of human behavior and their application to everyday life and work. Topics include introduction to psychology; social environments; communications and group processes; personality; emotions and motives; conflicts, stress, and anxiety; perception and learning; and life span development.

PSY 191 - Introductory Psychology
5.00 Credits/5 Contact Hours
Prerequisite: Regular status
Emphasizes the basics of psychology. Topics include science of psychology; social environments; life stages; physiology and behavior; personality; emotions and motives; conflicts, stress, and anxiety; abnormal behavior; and perception, learning, and intelligence.

PSY 291 – Human Growth and Development
5.00 Credits/5 Contact Hours
Prerequisite: PSY 191 with a grade of *C* or better
This course surveys the changes that occur during the human life cycle beginning with conception and continuing through late adulthood and death. The scientific basis of our knowledge of human growth and development and the interactive forces of nature and nurture are emphasized. Topics include physical, emotional, cognitive, and social development.

RAD - Radiologic Technology

RAD 101 - Introduction to Radiography
5.00 Credits/6 Contact Hours
Prerequisite: Program admission level reading and math competency
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. Topics include ethics, medical and legal considerations, the 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 institution affiliation, body mechanics/transportation, medical emergencies, contrast agents, mobile procedures, and patient preparation.

RAD 103 - Body, Trunk and Upper Extremity Procedures
3.00 Credits/5 Contact Hours
Prerequisite: AHS 101, BIO 193, BIO 194, RAD 101
Introduces the knowledge required to perform radiographic 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; and procedures, anatomy, and topographical anatomy related to body cavities, upper extremities, the shoulder girdle and bony thorax.

RAD 106 - Lower Extremity and Spine Procedures
3.00 Credits/5 Contact Hours
Prerequisite: BIO 193, BIO 194, RAD 101
Continues to develop the knowledge required to perform radiographic procedures. Topics include anatomy and routine projections of the lower extremities, anatomy and routine projections of the pelvic girdle, anatomy and routine projection of the spine.

RAD 107 - Principles of Radiographic Exposure I
4.00 Credits/6 Contact Hours
Prerequisite/Corequisite: RAD 101
Introduces knowledge of the factors that govern and influence the production of the radiographic image on radiographic film. Laboratory experiences will demonstrate applications of theoretical principles and concepts. Emphasis will be placed on knowledge and techniques required to process radiographic film. Topics include: radiographic density, radiographic contrast, recorded detail, distortion, exposure latitude, film holders and intensifying screens, processing area considerations, chemicals, handling and storage of film, characteristics of films utilized in radiographic procedures, automatic processor, artifacts, silver recovery, processing quality assurance concepts, and state and federal regulations.

RAD 109 - Contrast Procedures
3.00 Credits/4 Contact Hours
Prerequisite: RAD 101, BIO 193, BIO 194
Continues development of the knowledge and skill required prior to execution of radiographic procedures in the clinical setting. Topics include gastrointestinal (GI) procedures, genitourinary (GU) procedures, and biliary system procedures, sterile techniques, and minor procedures.

RAD 113 - Cranium Procedures
2.00 Credits/3 Contact Hours
Prerequisite: RAD 101, BIO 193, BIO 194
Continues to develop the knowledge required to perform radiographic procedures. Topics include anatomy and routine cranial radiography and anatomy and routine facial radiography.

RAD 116 - Principles of Radiographic Exposure II
3.00 Credits/3 Contact Hours
Prerequisite: RAD 107
Continues to develop knowledge of the factors that govern and influence the production of the radiographic image on radiographic film. Topics include beam limiting devices, beam filtration, scattered/secondary radiation, control of the remnant beam, technique formation, and exposure calculations.

RAD 117 - Radiographic Imaging Equipment
4.00 Credits/ 6 Contact Hours
Prerequisite: RAD 116, SCT 100
Provides knowledge of equipment routinely utilized to produce diagnostic images. Various recording media and techniques are discussed. Topics include: radiographic equipment, image intensified fluoroscopy, recording media and techniques, image noise, other imaging equipment, computer literacy, monitoring and maintenance, and state and federal regulations.

RAD 119 - Radiologic Pathology and Medical Terminology
3.00 Credits/3 Contact Hours
Prerequisite: RAD 101, BIO 193, BIO 194
Provides the student with an introduction to the concepts of disease. Pathology and disease as they relate to various radiographic procedures are discussed. Topics include pathology fundamentals, trauma/physical injury, systemic classification of disease and medical terminology.

RAD 120 - Principles of Radiation Biology and Protection
5.00 Credits/5 Contact Hours
Prerequisites: Program admission level competency in math, English and biology
Provides instruction on the principles of cell radiation interaction. Presents radiation effects on cells and factors affecting cell response. Discusses acute and chronic effects of radiation. Topics include radiation detection and measurement, patient protection, personnel protection, maximum permissible dose (MPD), agencies and regulations, introduction to radiation biology, cell anatomy, radiation/cell interaction, and effects of radiation.

RAD 123 - Radiologic Science I
5.00 Credits/5 Contact Hours
Prerequisite: MAT 191 or MAT 190
Introduces the concepts of basic physics and emphasizes the fundamentals of X-ray generating equipment. Topics include atomic structure, structure of matter, magnetism and electromagnetism, electrodynamics, and control of high voltage, rectification.

RAD 126 - Radiologic Technology Review
4.00 Credits/4 Contact Hours
Prerequisite/Corequisite: RAD 134, RAD 138
Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include principles of radiographic exposure; radiographic procedures; anatomy, physiology, pathology, and terminology; radiologic science and equipment; radiation protection; and patient care techniques.

RAD 132 - Clinical Radiography I
4.00 Credits/14 Contact Hours
Prerequisite: Regular status
Prerequisite/Corequisite: RAD 103
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 and bony thorax. Students' activities are under direct supervision.

RAD 133 - Clinical Radiography II
7.00 Credits/21 Contact Hours
Prerequisite: RAD 101 and RAD 132
Continues introductory student learning experiences in the hospital setting. Topics include equipment utilization; exposure techniques; participation in and/or observation of routine projections of the lower extremities, pelvic girdle, spine, and bony thorax; and participation in and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RAD 134 - Clinical Radiography III
7.00 Credits/21 Contact Hours
Prerequisite: RAD 101, RAD 132
Provides students with continued hospital setting work experience. Students improve skills in executing procedures introduced in Radiographic Procedures and practiced in previous clinicals. Topics include equipment utilization, exposure techniques, participation in and/or observation of gastrointestinal (GI), genitourinary (GU), and biliary system procedures, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RAD 135 - Clinical Radiography IV
7.00 Credits/21 Contact Hours
Prerequisite: RAD 101, RAD 132
Provides students with continued hospital setting work experience. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include sterile techniques, participation in and/or observation of minor special procedures, special equipment use, genitourinary system procedures, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RAD 136 - Clinical Radiography V
7.00 Credits/21 Contact Hours
Prerequisite: RAD 135
Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in Radiographic Procedures and practiced in previous clinical radiography courses. Topics include advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; participation in and/or observation of angiographic, interventional, minor special, and special genitourinary system procedures, and participation in and/or observation of special equipment use. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RAD 137 - Clinical Radiography VI
9.00 Credits/28 Contact Hours
Prerequisite: RAD 136
Prerequisite/Corequisite: RAD 120
Provides a hospital setting in which students continue to develop proficiency levels in skills introduced in previous Radiographic courses and practiced in previous clinical radiography courses. Topics include equipment utilization, exposure techniques, and participation in and/or observation of routine and special radiographic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RAD 138 - Clinical Radiography VII
9.00 Credits/28 Contact Hours
Prerequisite: RAD 137
Provides a culminating hospital setting work experience which allows the students to synthesize information and procedural instruction provided throughout the program. Topics include equipment utilization, exposure techniques, participation in 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.

RDG – Reading

RDG 097 - Reading III
5.00 Credits/5 Contact Hours
Prerequisite: RDG 096 or entrance reading score in accordance with approved DTAE admission score levels
This course emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

RDG 098 - Reading IV
5.00 Credits/5 Contact Hours
Prerequisite: RDG 097 or entrance reading score in accordance with approved DTAE admission score levels
This course provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

SOC - Sociology

SOC 191 - Introduction to Sociology
5.00 Credits / 5 Contact Hours
Prerequisite: Regular status
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, and social change.

SPC - Speech

SPC 191 - Fundamentals of Speech
5.00 Credits/5 Contact Hours
Prerequisite: Program admission level I language and reading competency
Introduces the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, and analysis of ideas presented by others.

SUR - Surgical Technology

SUR 101 - Introduction to Surgical Technology
6.00 Credits/7 Contact Hours
Prerequisite: Regular Status
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 orientation to surgical technology, asepsis and the surgical environment, basic instrumentation and equipment, principles of the sterilization process, and application of sterilization principles.

SUR 102 - Principles of Surgical Technology
5.00 Credits/7 Contact Hours
Prerequisite: SUR 101, SUR 108, PSY 101
Provides continued study of surgical team participation by introducing basic case preparation/procedures and creation/maintenance of the sterile field. Topics include basic case preparation and procedures, creation and maintenance of the sterile field, surgical supplies and accessory equipment, wound management, principles of surgery, minimal invasive surgery, and outpatient surgical procedures.

SUR 108 - Surgical Microbiology
3.00 Credits/3 Contact Hours
Prerequisite: AHS 104, AHS 109, BIO 193, SCT 100, ENG 101, MAT 101
Corequisite: SUR 101, PSY 101
Introduces the fundamentals of surgical microbiology. Topics include: historical development of microbiology, cell structure and theory, microbial function, human and pathogen relationships, infectious process, bloodborne and airborne pathogens, defense microorganisms, infection control, and principles of microbial control and destruction.

SUR 109 - Surgical Patient Care
3.00 Credits/4 Contact Hours
Prerequisite: SUR 101, SUR 108, PSY 101
Introduces a complex diversity of surgical patients. Topics include physiological diversities and needs, special patient needs, preoperative routine, intraoperative patient care, surgical emergencies, documentation and assessment skills, postoperative patient care, and care of the caregiver.

SUR 110 - Surgical Pharmacology
3.00 Credits/4 Contact Hours
Prerequisite: SUR 101, SUR 108, PSY 101
Corequisite: SUR 102, SUR 109
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.

SUR 112 - Introductory Surgical Practicum
7.00 Credits/21 Contact Hours
Prerequisite: Regular Status, BIO 193, SUR 101 (taken no longer than 6 months prior to enrollment in SUR 112)
Corequisite: SUR 102
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; basic instrumentation; and environmental sanitation.

SUR 203 - Surgical Procedures I
6.00 Credits/7 Contact Hours
Prerequisite: SUR 102, SUR 109, SUR 110, SUR 112
Corequisite: SUR 213
Continues introduction to surgical procedures, incisions, wound closure, operative pathology, and common complications as applied to general and specialty surgery. Topics include general surgery and special techniques, obstetrical and gynecological surgery, gastrointestinal surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

SUR 204 - Surgical Procedures II
6.00 Credits/7 Contact Hours
Prerequisite: SUR 203, SUR 213
Corequisite: SUR 214
Continues development of student knowledge and skills applicable to specialty surgery areas. Topics include ophthalmic surgery, orthopedic surgery, thoracic surgery, vascular surgery, cardiovascular surgery, and neurosurgery.

SUR 213 - Specialty Surgical Practicum
8.00 Credits/24 Contact Hours
Prerequisite: SUR 102, SUR 109, SUR 110, SUR 112, SUR 203
Continues development of surgical team participation through clinical experience. Emphasis is placed on observation/participation in routine procedures and procedures for general and specialty surgery. Topics include participation in and/or observation of general surgery, gastrointestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

SUR 214 - Advanced Specialty Surgical Practicum
8.00 Credits/24 Contact Hours
Prerequisite: SUR 203, SUR 204, SUR 213
Provides opportunity for students to complete all required Surgical Technology procedures through active participation in surgery in the clinical setting. Topics include primary scrub on specialty surgical procedures; participation as a surgical team conducting ophthalmic, orthopedic, thoracic, vascular, cardiovascular, and neurosurgery procedures; independent case preparation and implementation of intraoperative skills; and demonstration of employability skills.

SUR 224 - Seminar in Surgical Technology
3.00 Credits/3 Contact Hours
Prerequisite: SUR 214
Prepares students for entry into careers as surgical technologists and enables them to effectively review for the national certification examination. Topics include professional preparation, certification review, and test-taking skills.

WLD - Welding

WLD 100 - Introduction to Welding Technology
6.00 Credits/8 Contact Hours
Prerequisite: Provisional admission
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, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards.

WLD 101 - Oxyfuel Cutting
4.00 Credits/8 Contact Hours
Prerequisite: WLD 100
Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting. Topics include metal heating and cutting principles, safety procedures, use of cutting torches and apparatus, metal heating techniques, metal cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting. Practice in the laboratory is provided.

WLD 103 - Blueprint Reading I
3.00 Credits/5 Contact Hours
Prerequisite/Corequisite: WLD 100
Introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. Topics include basic lines; sketching; basic and sectional views; dimensions, notes, and specifications; isometrics; and detail and assembly of prints.

WLD 104 - Shielded Metal Arc Welding I
6.00 Credits/10 Contact Hours
Prerequisite/Corequisite: WLD 100
Introduces the fundamental theory, safety practices, equipment, and techniques required for shielded metal arc welding (SMAW) in the flat position. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial standard welds. Topics include SMAW safety and health practices, fundamental SMAW theory, basic electrical principles, SMAW machines and set up, electrode identification and selection, materials selection and preparation, and production of beads and joints in the flat position.

WLD 105 - Shielded Metal Arc Welding II
6.00 Credits/10 Contact Hours
Prerequisite: WLD 104
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.

WLD 106 - Shielded Metal Arc Welding III
6.00 Credits/10 Contact Hours
Prerequisite: WLD 104
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.

WLD 107 - Shielded Metal Arc Welding IV
6.00 Credits/10 Contact Hours
Prerequisite: WLD 104
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.

WLD 108 - Blueprint Reading II
3.00 Credits/5 Contact Hours
Prerequisite: WLD 103
Emphasizes welding symbols and definitions through which the engineer or designer communicates with the welder. Welding symbols are considered an integral part of blueprint reading for the welder. Topics include welding symbols and abbreviations; basic joints for weldment fabrications; industrially used welds; surfacing back or backing, and melt-thru welds; and structural shapes and joint design.

WLD 109 - Gas Metal Arc Welding (GMAW/MIG)
6.00 Credits/10 Contact Hours
Prerequisite: WLD 100
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.

WLD 110 - Gas Tungsten Arc Welding (GTAW/TIG)
4.00 Credits/7 Contact Hours
Prerequisite: WLD 100
Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

WLD 133 - Metal Welding and Cutting Techniques
3.00 Credits/5 Contact hours
Prerequisite: Provisional admission
Provides instruction in the fundamental use of the electric arc welder and the oxyacetylene cutting outfit. Emphasis is placed on safe setup and use of equipment. Topics include arc welding, flame cutting, safety practices, oxyfuel welding and brazing.

WLD 150 - Advanced Gas Tungsten Arc Welding (TIG)
5.00 Credits/10 Contact hours
Prerequisites: WLD 110
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.

Faculty & Staff Credentials

Faculty

Arfanakis, Dimitrios	Dentist, Dental Hygiene; DMD; Boston University
Bailey, John	Radiologic Technology; R.T (R), B.A. University of West Georgia
Bailey, Richard	Surgical Technology; B.S.N., University of West Georgia
Barkley, Brian	Mathematics; M.S., Jacksonville State University
Bissette, Tessa	Mathematics; M.S., University of Tennessee
Blackwood, Laurie	Adult Education; B.A., State University of New York
Blake-King, Phyllis	Adult Education; B.A., University of West Georgia
Bledsoe, June	Health Science; Georgia Baptist Hospital
Blinn, Ashlie	Lab Coordinator; M.S., University of West Georgia
Boykin, Denise	Cosmetology; Master Cosmetology License, State of Georgia
Brazier, Christina	Registered Nursing; M.S., University of West Georgia
Breland, Nancy	Early Childhood Education; M.A., LaGrange College
Chaffin, Amy	Culinary Arts; A.A., The Art Institute of Atlanta
Conaway, Gail	Cosmetology; Master Cosmetology License, State of Georgia
Cook, Kim	Health Science; B.S.N., University of Tennessee
Curry, Robert	Accounting; M.P.A., University of West Georgia
Dishman, Judy	Business Education; M.Ed., University of West Georgia
Eaves, Larry	Air Conditioning Technology
Eidson, Harry	Welding; diploma, West Central Technical College
Failinger, Glenn	Industrial Electrical Technology; M.S., Texas A&M
Gannage, George	Marketing Management; M.A., Michigan State University
Grisham, Linda	Science; M.A., Mobile University
Gunay, Nihal	Psychology; Ed.S., University of West Georgia
Hart, Raymond	Commercial Truck Driving; Certified License Examiner, State of Georgia
House, Janyce	Science; M.S., University of West Georgia
Howard, Laura	English and Reading; M.A., Auburn University
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