# GEORGIA NORTHWESTERN TECHNICAL COLLEGE

# **2011-2012** CATALOG

# Georgia Northwestern Technical College Semester Catalog

# 2011-2012

August 2011

# GNTC

www.gntc.edu

Floyd County Campus One Maurice Culberson Dr. Rome, Georgia 30161 706-295-6963

Polk County Campus 466 Brock Road Rockmart, Georgia 30153 770-684-5696 Gordon County Campus 1151 Hwy. 53 Spur Calhoun, Georgia 30701 706-624-1100

Walker County Campus 265 Bicentennial Trail Rock Spring, Georgia 30739 706-764-3510

Whitfield Murray Campus 2300 Maddox Chapel Road Dalton, Georgia 30721 706-272-2966

### A Unit of the Technical College System of Georgia

Georgia Northwestern Technical College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees, diplomas, and technical certificates of credit. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call (404) 679-4500 for questions about the accreditation of Georgia Northwestern Technical College. Inquiries such as admission requirements, financial aid, educational programs, etc., should be addressed directly to Georgia Northwestern Technical College (One Maurice Culberson Drive, Rome, GA 30161, Phone 706-295-6963, Fax 706-295-6944) and not to the Commission's office.

Georgia Northwestern Technical College is a unit of the Technical College System of Georgia and an Equal Opportunity Institution

Normal operating hours unless otherwise posted are 7:45 a.m. to 4:15 p.m. Monday through Friday.

GNTC's Catalog is produced by Georgia Northwestern Technical College One Maurice Culberson Drive Rome, Georgia 30161 706-295-6876 866-983-GNTC (4682) www.gntc.edu



# The President's Message

Foreclosures, plant closings, layoffs, mergers, bailouts, recession - these are not words generally used in a positive light when describing the economy. We are in the midst of the greatest recession in eight decades and the prospects for a rapid recovery seem bleak.

There is good news to be found. In northwest Georgia, we have a strong, probusiness infrastructure and our economic base has proven to be resilient during past downturns. Our service area lies between Atlanta and Chattanooga and we will continue to be called upon to provide education and training programs for the businesses in the region. We will survive this recession. There is a strong demand for workers with good technical skills. Companies such as Georgia Power, Pirelli Tire, and our major health care providers depend strongly on the technical colleges for their supply of educated, skilled employees.

Georgia Northwestern Technical College is poised to assist you whether you need to prepare for your GED<sup>®</sup> or have a college degree and want to get skills that will prepare you for the real world. We are the college connected to the job market.

As you read through this catalog, keep in mind we have campuses in Floyd, Gordon, Polk, Walker and Whitfield Counties. We are accessible, affordable, and aligned with the employers in northwest Georgia.

Sincerely,

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Craig McDaniel, Ed.D. GNTC President

#### **General Catalog Disclaimer**

The contents of this catalog do not constitute a contract between Georgia Northwestern Technical College and its students on either a collective or individual basis. It represents Georgia Northwestern Technical College's best academic, technical, social, and financial planning information at the time the catalog was published. Courses and curriculum change continually based on evaluations and needs. Modifications of fees, and other changes, plus unforeseen changes in other special aspects of Georgia Northwestern Technical College life sometimes occur between college catalog publications, and the changes may not be represented in the current catalog version. Because of this, Georgia Northwestern Technical College does not assume contractual obligation with students for the contents of this catalog. Georgia Northwestern Technical College reserves the right to change any provision listed in the catalog, including, but not limited to entrance requirements and admission procedures, courses and programs of study, academic requirements for graduation, fees and charges, financial aid rules and regulations, and the college calendar without actual notice to individual students. Information on changes will be available on the college's home web page **www.gntc.edu** and in the GNTC Admissions Office.

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The Georgia Northwestern Technical College Catalog is revised periodically. The most current version is available on our website: **www.gntc.edu** 

#### Georgia Northwestern Technical College

#### **Program Accrediting Agencies**

Accreditation Council for Occupational Therapy Education Accreditation Review Committee on Education in Surgical Technology (ARC-ST) American Dental Association (ADA) Automotive Service Excellence (ASE) Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) Commission on Accreditation of Allied Health Education Programs (CAAHEP): Diagnostic Medical Sonography Echocardiography Medical Assisting Surgical Technology Vascular Technology Commission on Accreditation of Respiratory Care (CoARC) Council on Occupational Education (COE) Georgia Board of Examiners of Licensed Practical Nursing Georgia Office of Secretary of State Georgia Board of Nursing Georgia Department of Human Resources: Emergency Medical Services Division Georgia Health Partnership Joint Review Committee on Educational Programs in Diagnostic Medical Sonography (JRC-DMS) Joint Review Committee on Educational Programs in Radiologic Technology (JRCERT) Radiation Therapy Radiologic Technology Medical Assisting Education Review Board (MAERB) National League for Nursing Accrediting Commission

#### **GNTC Regulating Agencies**

Federal Aviation Administration (FAA) Georgia Department of Community Health Georgia Department of Driver Services Georgia Firefighter Standards and Training Council Georgia Professional Standards Commission Georgia State Board of Cosmetology Georgia State Board of Massage Therapy Microsoft National Association of Education of Young Children National-Interstate Council of State Boards of Cosmetology Testing Peace Office Standards and Training (POST)

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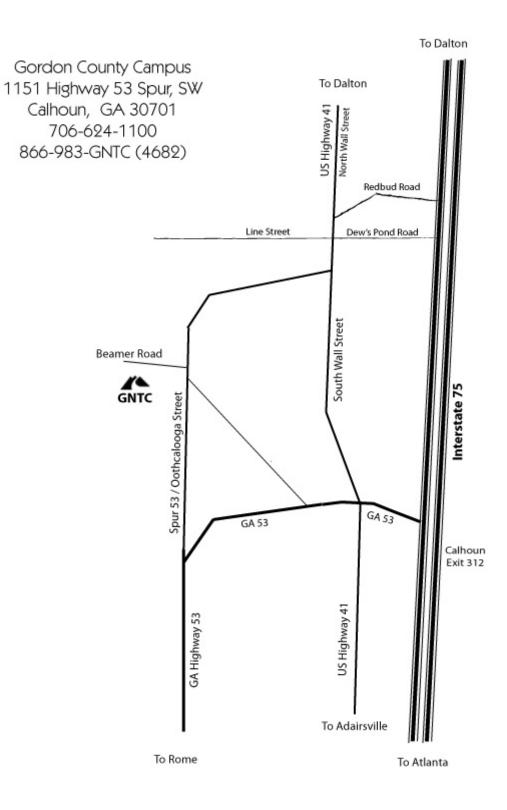
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# Campus Maps and Directions

### Floyd County Campus Road Map

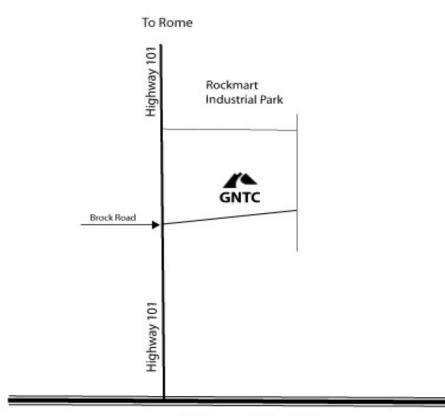


### Gordon County Campus Road Map

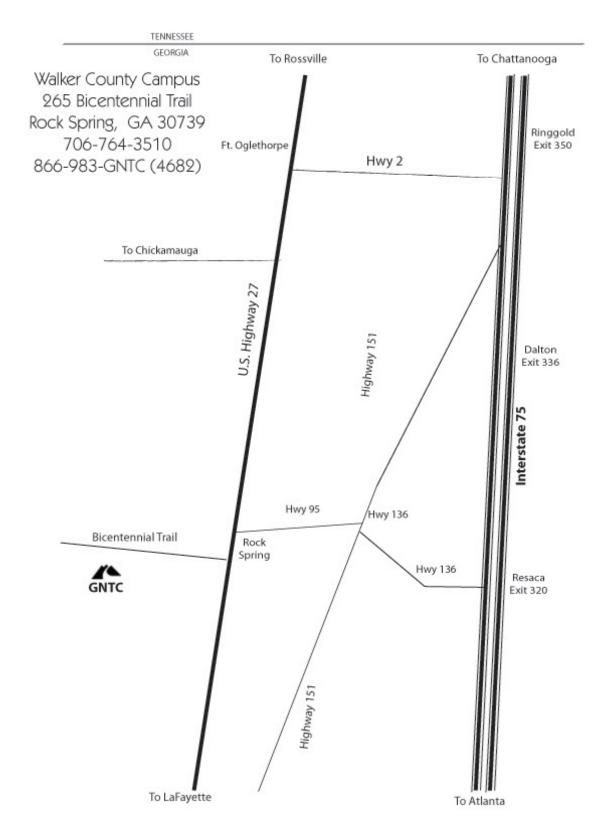


### Polk County Campus Road Map

Polk County Campus 466 Brock Road Rockmart, GA 30153 770-684-5696 866-983-GNTC (4682)



Cedartown Highway 278



### Walker County Campus Road Map

## Floyd County Campus Aerial Map



## Gordon County Campus Aerial Map



## Polk County Campus Aerial Map



## Walker County Campus Aerial Map



# Whitfield Murray Campus Aerial Map



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# General College Information and Policies

#### HISTORY OF GEORGIA NORTHWESTERN TECHNICAL COLLEGE

On September 4, 2008, the State Board of Technical and Adult Education approved the merger of Coosa Valley Technical College and Northwestern Technical College to be effective July 1, 2009. The two colleges have individual, meaningful histories.

Coosa Valley Technical College (CVTC) was founded in 1962 by C. Maurice Culberson. It was born of a community plea to provide people with the skills and training necessary to succeed in a rapidly changing economy. This became the mission of the college. Throughout the years, the college campus, along with the college offerings grew tremendously. Coosa Valley Tech began with one campus and prior to the merger had expanded to three campuses, including the Gordon Campus, built in 1997 and the Polk Campus, built in 1998. In 1962, the college offered seven programs of study and by 2009 had expanded to over 100 program offerings. In 2004, CVTC completed the construction of a 54,000 square foot Health Occupations Education Center and Library. With 29 health technology programs housed in the Health Occupations Education Center, CVTC became one of the largest providers of health care occupational training in the state of Georgia. In December 2006, Coosa Valley Technical College became accredited through the Commission on Colleges of the Southern Association of Colleges and Schools (SACSCOC). In 2009, CVTC's yearly enrollment averaged 10,000 students with 250 supporting faculty and staff, and CVTC was offering degrees, diplomas, and certificates of credit; continuing education; adult education; learning support; and general education classes.

From its beginnings in 1964 as a one building campus off of Highway 27 in Walker County Georgia, Northwestern Technical College (NTC) has changed and grown with the communities of Northwest Georgia over the past five decades. Originally named the Walker County Area Vocational-Technical School, NTC enrolled 150 students in one of eight programs of study. Now retired and living in Mississippi, NTC's first Director, Dea Pounders, made the mission of the college clear from the very beginning. Mr. Pounders wrote, "The skilled and technical courses at our college are designed to fill the needs of youth and adults and prepare them for a modern world of work." New job demand called for new programs and by 2009 NTC made more than 100 program options available. The Commission on Colleges of the Southern Association of Colleges and Schools initially accredited Northwestern Technical College in 1997; then, reaffirming the accreditation in 2002. At the time of the merger with Coosa Valley Technical College, Northwestern offered 23 degree options, along with 24 diplomas and 62 certificates of credit. NTC's campus spanned nearly seventy acres in Rock Spring, Georgia and enrolled more than 2,500 students quarterly.

After merging these two great colleges, Georgia Northwestern Technical College (GNTC) was established in 2009 and is creating its own history. The college currently serves the nine counties of Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, Polk, Walker, and Whitfield and has campuses located in Floyd, Gordon, Polk, Walker, and Whitfield counties. The Floyd County Campus was designated as the home campus for the college. GNTC offers over 200 programs of study in degrees, diplomas, and certificates. In 2010, GNTC impacted 23,383 Northwest Georgians with a credit enrollment of 9,795 students and an additional enrollment of 13,588 through economic development and adult education programs. Expansion of services continues with the opening of the Woodlee Culinary Arts Building in 2010, the awarding of funding for a new Catoosa County Campus in June 2010, and the offering of courses on the new Whitfield Murray Campus beginning fall semester of 2011.

## Academic Calendar 2011-2012

Fall Se	emester			
	Application and Testing Deadline	July 27		
	Final Registration (new and returning students)	August 11-12		
	Payment Deadline for Tuition and Fees	August 12		
	First Day of Class	August 22		
	Last Day to Drop a Class /100% Refund	August 24		
	Last Day to Add a Class	August 30		
	Fall Break	October 10-11		
	Last Day to Withdraw and Receive Grade of "W"	October 17		
	Returning Student Registration Week (Spring)	October 17-21		
	Last Day to Drop & Receive Grade of "WP" or "WF"	November 16		
	Student Holiday	November 23		
	School Closed	November 24-25		
	Last Day of Class	December 12		
	Deadline for Graduation Applications for Spring Semes			
	Final Examination Period	December 14-15		
Spring	J Semester			
	Application and Testing Deadline	November 29		
	Final Registration (new and returning students)	December 13		
	Payment Deadline for Tuition and Fees	December 15		
	School Closed December 22-28, 2011,			
	First Day of Class	January 5		
	Last Day to Drop a Class /100% Refund Last Day to Add a Class	January 9 January 13		
	School Closed	January 16		
	Last Day to Withdraw and Receive Grade of "W"	February 28		
	Faculty Development Days (No classes)	March 7-9		
	Returning Student Registration Week (Summer)	March 19-30		
	Spring Break	April 2-6		
	Last Day to Drop & Receive Grade of "WP" or "WF"	April 10		
	Last Day of Class	May 1		
	Final Registration for Summer Semester	, May 2		
	Final Examination Period	May 3-4		
Summer Semester				
	Application and Testing Deadline	April 18		
	Final Registration (new and returning students)	May 2		
	Payment Deadline for Tuition and Fees	May 4		
	First Day of Class (A Session)	May 21		
	Last Day to Drop a Class /100% Refund (A Session)	May 23		
	Last Day to Add a Class (A Session)	May 25		
	Holiday	May 28		
	Last Day to Drop and Receive Grade of "W" (A Session			
	Returning Student Registration Week (Fall)	June 25-29		
	Last Day to Drop & Receive Grade of "WP" or "WF" (A	, ,		
	Last Day of Class (A Session)	August 6		
	Final Examination Period (A Session)	August 8-9		
	First Day of Class (B Session) Last Day to Drop a Class / 100% Refund (B Session)	May 21 May 23		
	Last Day to Add a Class (B Session)	May 23 May 23		
	Last day to Drop and Receive Grade of "W" (B Session)			
	Last Day to Drop & Receive Grade of "WP" or "WF" (B			
	Last Day of Class (B Session)	June 25		

First Day of Class (C Session)	July 5
Last Day to Drop / 100% Refund (C Session)	July 9
Last Day to Add a Class (C Session)	July 9
Last Day to Drop and Receive Grade of "W" (C Sessio	n) July 23
Last Day to Drop & Receive Grade of "WP" or "WF" (C	Session) August 1
Last Day Of Class (C Session)	August 8
Fall Semester	-
Application and Testing Deadline	July 24
Final Registration (new and returning students)	August 7
Payment Deadline for Tuition and Fees	August 9
First Day of Class	August 20
Last Day to Drop a Class /100% Refund	August 22
Last Day to Add a Class	August 24
Fall Break	October 8-9
Last Day to Withdraw and Receive Grade of "W"	October 15
Returning Student Registration Week (Spring)	October 15-19
Last Day to Drop & Receive Grade of "WP" or "WF"	November 14
Holiday	November 21-23
Last Day of Class	December 10
Final Examination Period	December 12-13

#### **Main Campus**

The main campus of Georgia Northwestern Technical College is located at One Maurice Culberson Drive, Rome, GA 30161. Dr. Craig McDaniel is the college president.

#### Mission

The mission of Georgia Northwestern Technical College is to provide accessible, high quality technical education, and workforce development opportunities that lead to careers in technology, business, health, and public services. Operating under the Technical College System of Georgia, both on-campus and distance education programs are offered that lead to certificates, diplomas, and associate degrees. The educational programs of the college focus on the development of technical competence and critical thinking skills as well as social, personal, and intellectual values. In addition, Georgia Northwestern Technical College supports the communities of the northwest Georgia service area by providing adult education and economic development services, customized business and industry training, and personal enrichment programs that meet the workforce needs of area citizens, communities, and companies.

#### **Our Vision**

#### **Community Focus**

Georgia Northwestern Technical College (GNTC) is built upon a close relationship with the community and a commitment to be responsive to community needs. GNTC meets the unique needs of each community in Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, Polk, Walker, and Whitfield counties while helping citizens, companies, and communities benefit from working together. GNTC helps communities by providing skilled technical program graduates, training services for local companies, and adult education services to develop literate families and workers. GNTC will reach out to all nine counties in the service area while working to enhance the larger community. GNTC's purpose will continue to be community development through workforce development.

#### **Quality Technical Programs and Services**

GNTC will offer a comprehensive range of quality, high-demand associate degree nursing, associate of applied science degree, technical diploma, and technical certificate of credit programs to prepare students for careers. The college will be recognized as the premiere training center in Northwest Georgia for industrial technologies, healthcare technologies, business technologies, and public service technologies.

#### Student-Oriented Learning

Instruction and all other activities at GNTC are student-centered. GNTC faculty will provide instruction that enables students to become proficient professionals in their chosen fields of study. Faculty will be highly qualified and will be real-world professionals who will help students to bridge the gap between classroom instruction and real-world applications.

#### Seamless and Accessible Education

A collaborative relationship among high schools, GNTC, and other colleges will provide students with opportunities to make seamless educational transitions. GNTC will place emphasis on dual enrollment of high school students in technical programs and on distance education to make instruction more accessible.

#### **Business Partnerships**

An active relationship between businesses and GNTC will continue to grow. Credit programs will be developed and offered to meet business and industry needs, and noncredit customized training, human resource development services, and technology transfer services will be specifically designed to meet the needs of individual companies and consortia of companies with similar needs.

#### **Our Beliefs**

The beliefs that are fundamental to all Georgia Northwestern Technical College's plans, programs, services, and operations include:

• Each individual has value and should have access to equal educational opportunity.

• Literacy and English proficiency are essential for people to be self-sufficient in today's society.

• The vast majority of area citizens should gain training beyond a high school diploma to obtain satisfying employment and earn adequate wages.

• The college should be an active partner in the life of the community including educational, civic, and cultural affairs.

• Leading-edge technology should be incorporated into all GNTC's programs, services, and operations.

• For our college to create and sustain a high level of relevance for its service areas, it must be able to adapt to the economic changes in a dynamic world.

• Our commitments to partnerships between the college and businesses and industries in the communities we serve should be maintained and strengthened.

#### State Standards

As a higher education institution of the Technical College System of Georgia (TCSG), Georgia Northwestern Technical College adheres to the policies, procedures, and achievement criteria as established and presented in the state curriculum standards documents. These standards were/are developed with direct involvement of business and industry and serve as benchmarks for providing high quality technical training that meets the needs of business and industry. These standards serve as the industry-validated specifications and/or competencies for each occupational program. Standards mean that educational partners in business and industry can rely on our graduates to have the knowledge and technical expertise to perform their jobs to world-class standards. Adherence to TCSG curriculum standards allows Georgia Northwestern Technical College to offer a warranty/guarantee to each graduate of its programs.

#### **Advisory Committees**

Each instructional program maintains contact with private industry through its occupational advisory committee. An advisory committee is comprised of members of the business and industry community with interest in the college's mission and the specific program. Committee members are usually employers of program graduates. The committee meets twice annually and assures that desirable, relevant, and current practices of the occupation are being taught. The committee may also review the educational program, recommend admission requirements, program content, program length, program objectives, competency tests, instructional materials, equipment, method of evaluation, level of skills and/or proficiency required for completion, and appropriateness of the delivery mode for the program.

#### **Guarantee/Warranty**

Georgia Northwestern Technical College, through TCSG, guarantees that its graduates have demonstrated proficiency in those competencies defined in its approved state curriculum standards. Should any student within two years of graduation not be able to perform one or more of the competencies contained in the industry-validated standard, the college agrees to provide specific retraining to the student at no cost to the employer or graduate for tuition or instructional fees. This guarantee applies to any graduate of the college who is employed in the field of his or her training. To inquire or file a claim under this warranty, please call the Office of Academic Affairs.

#### **Intellectual Property**

To further its goal of making education accessible to as many people as possible, Georgia Northwestern Technical College owns the intellectual property rights to any and all works produced by or for the college. In order that Georgia Northwestern Technical College be able to utilize to the best and fullest extent all works produced for it, and all works provided for its use, anyone producing work for the college and anyone providing work for the college's use, represents and warrants that such works:

• Do not violate any law;

• Do not violate or infringe any intellectual property right (including but not limited to copyright, trademark, patent, or right of publicity) of any person or firm; do not libel, defame, or invade the privacy of any person or firm.

#### **Directory Information**

Directory information is treated as public information and is generally available about all students and former students at the college's discretion. Directory information includes a student's: name, address, telephone number, date and place of birth, major field of study, age, schools previously attended, awards applied for and/ or received, dates of attendance, degrees, honors, and participation in officially recognized activities and sports. A student who does not wish his or her directory information to be disclosed must file a written request with the registrar.

#### **Policy for Student Photos and Videos**

GNTC takes photographs and videos of students in various programs and events for use in official marketing materials. Examples of official marketing materials include, but are not limited to, newspaper advertising and articles, college publications, website advertising, and the college's website. Students agree to release and hold harmless Georgia Northwestern Technical College from any and all claims, damages, action, liability, and expense in connection with the use of their image. Students who do not wish to have their image used by the college must file a written request with Marketing and PR and must also notify the photographer or videographer of their wishes to be excluded in the case of any general photographs or video being taken.

#### Change of Name or Address

Students are responsible for notifying the office of student affairs of any change of name or address. A change of status form, available in the office of student affairs or the college website, must be completed in order to make a change of name or address. The mailing of notices to the last address on record constitutes official notification.

#### Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 (FERPA), with which Georgia Northwestern Technical College complies fully, was designated to protect the privacy of educational records.

The Family Educational Rights and Privacy Act affords students certain rights with respect to their education records. They are:

(1) The right to inspect and review information contained in education records.(2) The right to request the amendment of the student's education records that the student believes is inaccurate.

(3) The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

(4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by Georgia Northwestern Technical College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202-5920 (202) 260-3887

Any questions concerning FERPA should be directed to the Office of the Registrar. Selena Magnusson, Registrar Georgia Northwestern Technical College One Maurice Culberson Drive Rome, GA 30161 (706) 295-6866

#### **Student Communication**

#### Student Email Account

Georgia Northwestern Technical College generated email accounts are the official means of communication with students. Instructions can be found at www.gntc.edu under the Student Email link.

#### **Student Media Information**

Georgia Northwestern Technical College utilizes various social media sites to communicate information with students and the public regarding news and events at the college. GNTC's social media sites also provide a forum for students, faculty, and staff to communicate with one another. Students are encouraged to participate in GNTC's social media sites by joining, following, or becoming a fan of the college's sites including Facebook, Twitter, and YouTube. To become part of GNTC's social media network visit the college website at www.gntc.edu. Links to all of the GNTC's social media sites can be found at the very bottom of the college's homepage, as well as a link to "Social Media Guidelines." Each student participating in any of GNTC's social media sites is responsible for reading and adhering to the policies found in the "Social Media Guidelines" document.

Bulletin boards and multi-media distribution monitors are located in designated areas of the college. It is the student's responsibility to read the bulletin boards and multi-media distribution monitors daily for important messages. Flyers, handbooks, posters, or other similar materials may not be posted on walls, doors, or windows.

#### **GNTC e2Campus Alert! Opt-in Enrollment**

To provide GNTC faculty, staff and students with timely emergency and weather closing notifications, the college has implemented the GNTC e2Campus "Alert!" notification system. This is an "opt-in" service: You must create your own account and enter your contact information in order to received notifications". If you do not create an account, you will not be notified of emergencies and weather/campus closings.

GNTC Alert! Delivers messages via SMS (text message to your cell phone), email, and voice phone calls.When you enroll, you may enter any number of contact numbers/email addresses where you wish to receive notifications.

Sign up is quick and easy, and GNTC pledges that your information is confidential and used ONLY for notification via GNTC Alert! You will not be spammed, and GNTC will NOT use this system for "routine reminders" (such as registration deadlines, etc.) GNTC's e2Campus Alert! will be used exclusively for emergency and weather/campus closing messages.

Sign up for GNTC Alert! at www.gntc.edu/e2campus.php

#### **Severe Weather Policy and Procedure**

Decisions regarding conditions affecting Georgia Northwestern Technical College during emergency/severe weather will be made by the vice president of academic affairs, after consultation with the president. Announcements to employees and students concerning closing of college facilities, opening late, or closing early will be made as early in the day as possible. GNTC will announce closings or delayed openings through GNTC Alert!, GNTC's website at www.gntc.edu, and on GNTC's Facebook page. The college will not announce that it is open, only closings or delayed openings. It is the responsibility of each person to use his/her best judgment to decide if it is safe to travel.

In the event of severe/inclement weather, GNTC will communicate to students, faculty, and staff using the following methods:

- GNTC Website -www.gntc.edu
- GNTC Social Media Sites: Twitter and Facebook
- GNTC Alert! System

#### Health and Safety

Georgia Northwestern Technical College campuses have first aid kits that meet OSHA standards. First aid kits are conveniently located in shops and labs and in public areas in each building. Students are referred to off-campus facilities for treatment of injuries or illnesses. Medical care at off-campus facilities is the student's financial responsibility. The college provides a student accident insurance plan for credit students that is especially designed for students of community and technical colleges. Complete details of the coverage may be obtained from the Office of the Registrar.

#### **Campus Security**

#### **Campus Security Policies and Crime**

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 USC § 1092(f)) is the landmark federal law, originally known as the Campus Security Act, that requires colleges and universities across the United States to disclose information about crime on and around their campuses. This includes information on criminal actions or other emergencies occurring on campus and the college's response, policies concerning security and access to facilities, sexual harassment complaint procedures, and personal awareness and responsibilities of students to prevent and report crime. Annual crime statistics for offenses reported to the college and/or local police agencies are compiled and posted on the college website. Notification is given to current students and employees when the annual report is published prior to October 1. Written reports and information can be obtained from the Safety Director and Campus Managers.

#### **Student Parking**

The college has designated areas for student parking. All full and part-time students, faculty and staff are required to display a campus parking permit on his or her vehicle and to park in designated areas. There is no charge for the parking permit. Not properly displaying a parking permit or parking in an unauthorized area such as handicapped spaces, on yellow curbs, in designated visitor, faculty or staff parking, may result in the vehicle being towed, parking citations, and/or disciplinary action. Citations will also be issued to vehicles not following the speed limit, driving recklessly, or performing other actions deemed to be a safety risk for pedestrians. Parking permits are distributed at registration.

#### **Weapons Policy**

1. Unless otherwise provided by law, it is unlawful for any person to carry, possess, or have under such person's control any firearm, weapon, or unlawful explosive compound while on technical college property to include all campus and off-site work locations; at a technical college sanctioned function; or, on a bus or other means of transportation furnished by the college.

2. Unless otherwise provided by law, it is unlawful for any person to carry a weapon (i.e., a knife or handgun) or a long gun while in a government building or a building occupied, in part, by a government entity.

3. Unless otherwise provided by law, it is an express violation of policy for any individual to use, possess, manufacture, distribute, maintain, transport, or receive any of the following in the System Office or on technical college property to include all campus and off-site work locations, or at any college sanctioned function:

a. any firearm or weapon whether operable or inoperable as defined in O.C.G.A. 16-11-127.1 or any facsimile thereof, including, but not limited to paintball guns, BB guns, potato guns, air soft guns, or any device that propels a projectile of any kind;

b. any dangerous weapon, machine gun, sawed-off shotgun or rifle, hotgun or silencer as defined in O.C.G.A. 16-11-121;

any bacteriological weapon, biological weapon, destructive device, c. detonator, explosive, incendiary, or over-pressure device, or poison gas as defined in O.C.G.A. 16-7-80.

any explosive compound/material defined in O.C.G.A. 16-7-81; or, d. any hoax device, replica of a destructive device or configuration of e. explosive materials with the appearance of a destructive device, including, but not limited to, fake bombs, packages containing substances with the appearance of chemical explosives or toxic materials.

4. Personal Possession (Carrying) of a Weapon – the possession of a valid firearms permit and/or a valid license to carry a concealed weapon does not permit any individual (e.g., staff, student, etc) to carry a weapon on their person on any technical college campus, satellite campus or other work site, or at any college sanctioned event.

5. Vehicle in Transit – an individual over the age of 21 who holds a valid firearms permit or license to carry a concealed weapon may possess a weapon on their person in his/her vehicle or may keep a weapon in a locked compartment of, in a locked container in, or in a locked firearms rack in a motor vehicle when in transit on technical college property.

6. Parked Vehicle – the driver of a vehicle parked on the property of any technical college (including the personal vehicle of a student, System Office, or technical college employee) may keep a firearm in his/her vehicle provided the weapon is locked out of sight within the vehicle's trunk, glove box, or other enclosed compartment or areas within the vehicle. Note: this provision applies to those drivers possessing a valid Georgia weapons carry license or who are otherwise authorized by law to carry or possess a firearm/weapon.

#### **Corrective Action**

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

#### **Tobacco Policy**

In the interest of better promoting the health of our staff and students, Georgia Northwestern Technical College campuses is a tobacco-free environment. Smoking and use of other tobacco products (e.g., smokeless tobacco) will not be permitted on any college campus to include, but not limited to, campus buildings, sidewalks, parking lots, building entrances and common areas, and in college-owned vehicles.

Smoking or the use of any type of tobacco product is only permitted within private vehicles parked/driven on designated college parking areas and roads. Persons using tobacco while in private vehicles must dispose of the tobacco prior to exiting the vehicle.

Monitoring of this policy shall be the responsibility of the security personnel, faculty, and staff. Those students found violating this policy will be governed by the following:

#### First Offense Warning

#### Second Offense

Referral by the security personnel, faculty, or staff to the supervisor of the area in which the offense occurs.

#### **Additional Offenses**

Referral by the supervisor of the area to the Student Disciplinary Officer for further action based on the Student Code of Conduct and treated as other disciplinary issues per the policies outlined in the GNTC Catalog and/or the Student Handbook.

#### **Complaint Resolution or Appeals**

Georgia Northwestern Technical College is committed to ensuring an environment that is fair, humane, and respectful for all students, an environment that supports and rewards students on the basis of relevant considerations, and that is free from illegal or inappropriate conduct.

In an instance of perceived violation of college policies, standards of professional conduct or state or federal law, a student may file a complaint, which shall be resolved as addressed in these policies and procedures. Individuals may follow an informal and/or formal process to reach resolution of the complaint. (At no time will college policy contradict policy and procedure as determined by the Technical College System of Georgia as listed in the TCSG Policy and Procedures Manual at www.tcsg. edu. If a contradiction is realized, the TCSG Policy will prevail.)

Retaliation in any form against individuals bringing grievances is prohibited and will subject the retaliating individual to disciplinary action. An individual who initiates a fraudulent or bad faith claim or charge shall also be subject to disciplinary action.

#### **The Informal Process**

Complainants are encouraged to seek informal resolution of their grievances or concerns. This procedure is intended to encourage communication between the parties involved, either directly or through an intermediary, in order to facilitate a mutual understanding of different perspectives regarding the complaint. An individual is not required to seek resolution nor does the seeking of an informal resolution prohibit the individual from filing a formal grievance or complaint. Contacts for filing grievances or complaints are discussed below.

#### **The Formal Process**

If resolution is not satisfactory at the informal levels, or if a student does not wish to follow the informal process, a student may submit a formal complaint. A formal complaint must be in writing and must specifically state the basis for the complaint and the remedy that the student seeks.

The procedures for formal complaint and the person to whom the student addresses a formal complaint may be different based on the type of formal complaint. Types of complaints and procedures for seeking resolution are addressed below.

#### Written Student Complaint – Academic

Any student at Georgia Northwestern Technical College who feels he/she has an academic complaint should first seek resolution of the complaint with the instructor of the class in which the situation has occurred. The complaint should be presented to the instructor in written form, and dated, in order to better establish a timeline for resolution of the complaint.

The complaint should be brought to the instructor's attention before the end of the semester in which the situation occurred. In any case the complaint must be brought to the attention of GNTC faculty before the beginning of the next academic session.\* Failure to lodge a complaint in a timely fashion may preclude the student from filing said complaint at a later date. Once a student has notified the instructor of the

complaint the instructor has five (5) business days to reply in writing. This reply should list the student's original complaint and the solution offered by the instructor. A copy of the original complaint and a copy of the instructor's response will be forwarded to the instructor's dean of academic affairs.

If the student does not get a satisfactory resolution to his/her complaint, resolution may be sought by appealing to the dean of academic affairs for the instructor of the course in which the situation arose. A written description of the incident, including all pertinent details and the solution offered by the instructor, must be given to the dean. The appeal must be received within ten (10) business days after the failure to receive satisfaction from the instructor. Once the dean receives the formal complaint, he/she has seven (7) business days to reply in writing to the student.

If the student is still not satisfied with the results of their complaint he/she has ten (10) business days from the time of the receipt of the decision in which to file a written appeal with the vice president of academic affairs (VPAA) at GNTC.

Once the student has filed a written appeal with the VPAA, he/she should expect to receive a reply within ten (10) business days. Once the vice president makes a decision on the appeal, that decision is final. No further appeal is heard.

\*NOTE: If the student's complaint is regarding the final grade awarded for a particular course then the student has ten (10) business days from the time they could reasonably be aware of their final grade. This "reasonable time" is defined as starting once grades are posted and made available to students on the institutions electronic records webpage.

# Statement of Non-Discrimination/Equal Opportunity Statement of Compliance

Georgia Northwestern Technical College is a unit of the Technical College System of Georgia and an Equal Opportunity Institute. GNTC, TCSG 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, academic or economic disadvantage, 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 TCSG and GNTC administered programs, including any Workforce Investment Act of 1988 (WIA) Title I financed programs. It also encompasses the employment of personnel and contracting for goods and services. The TCSG and GNTC shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity. The following individuals are responsible for coordinating the college's implementation of Title VI, Title IX, Section 504, and the ADA: Title VI & IX Coordinator: Sonya Richards, 706-295-6932; Section 504 & ADA Coordinators: Sheila Parker, Floyd County Campus, 706-295-6517; Michael Walters, Walker County Campus, 706-764-3799; and Kevan Watkins, Whitfield Murray Campus 706-272-2966.

#### **Equal Opportunity Complaint or Appeal**

Students of Georgia Northwestern Technical College should report any alleged discrimination 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), to the person designated below as the coordinator. The

coordinator should complete the information process and submit to the president within 12 days of the complaint.

Report complaints concerning discrimination on the basis of race, color, creed, national or ethnic origin, gender, age or religion to: Sonya Richards, Special Populations Coordinator Georgia Northwestern Technical College Floyd County Campus, Room A-126B One Maurice Culberson Drive Rome, GA 30161 706-295-6932

Report complaints concerning discrimination on the basis of disability to: Sheila Parker, ADA Coordinator/Interpreter Floyd County Campus, Room A-119 One Maurice Culberson Drive Rome, GA 30161 706-295-6517 or Michael Walters Walker County Campus, Room ADM-209 265 Bicentennial Trail Rock Spring, GA 30739 706-764-3799

#### **Gender/Sexual Harassment**

Georgia Northwestern Technical College prohibits sexual harassment and harassment on the basis of race, color, creed, gender, national or ethnic origin, religion, disability, age, or citizenship status. Sexual harassment is a form of gender discrimination and is a violation of state and federal law. Sexual harassment is defined as: "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." Such conduct is prohibited when the behavior is directed to an individual because of his or her gender and (1) when submission to such conduct is made either explicitly or implicitly a term or condition of instruction, employment or otherwise full participation in department or college life; (2) submission to or rejection of such conduct is considered in evaluating a person's academic work or job performance, or (3) such conduct has the purpose or effect of interfering with a person's academic or job performance; creating a sexually intimidating, hostile, or offensive working or educational environment; or interfering with one's ability to participate in or benefit from an educational program or activity.

All persons who believe that they are or may have been victims of improper harassment are encouraged to seek resolution promptly. Those who have been witness to sexual harassment or other improper harassment should report their observation to the Title IX Coordinator:

Sonya Richards Special Populations Coordinator Georgia Northwestern Technical College Floyd County Campus, Room A-126B One Maurice Culberson Drive Rome, GA 30161 706-295-6932 Other violations of this policy include:

1) retaliating against a person who reports alleged harassment or participates as a witness in a harassment investigation;

 2) disregarding, failing to investigate adequately, or delaying investigations of harassment allegations when responsibility for report and/or investigation of harassment complaints comprises part of one's supervisory responsibilities; or
 3) deliberately making a false allegation of sexual or other improper harassment. However, failure to prove a claim of harassment does not constitute proof of a false accusation.

Students who engage in sexual or other improper harassment on college premises or off college premises at a college-sponsored activity will be subject to discipline. In most circumstances, it is best for all parties that complaints of harassment be resolved at the lowest possible organizational level with a minimum of formality.

Confidentiality and privacy of those involved will be respected during all complaint procedures to the degree the procedure and the law will allow.

#### **Gender/Sexual Harassment Complaint Procedure**

The following procedure is designed specifically for the reporting and processing of complaints of sexual harassment.

Any student who alleges a violation of sexual harassment shall notify the Sexual Harassment (Title IX) Coordinator within ten (10) business days following the alleged incident or as soon thereafter as reasonably possible. The complaint shall contain a brief description of the alleged violation and relief requested. If the complaint is oral, the coordinator shall prepare a written record of the complaint and ask the complainant to sign the statement, indicating that it accurately reflects the essentials of the complaint. Within seven (7) business days following the filing of a complaint, the coordinator will conduct an investigation of the alleged incident. Within five (5) business days after concluding the investigation, the coordinator will review the evidence gathered during the investigation and make a written report to the vice president of student affairs and/or college president presenting findings of fact, investigative conclusions, and recommendations as to any disciplinary action to be taken, if appropriate. A copy of this report shall be given to the complainant and accused offender. Upon reasonable request the vice president or president may grant the coordinator additional time for completing the investigation or written report. The investigator will have at least 30 days, if needed, from the time of the report of a sexual harassment complaint to complete investigations and submit a report of findings to the president or designee. The accused offender (respondent) or complaining party may respond to the report of the coordinator. Written responses must be submitted to the president within seven (7) business days from receipt of the coordinator's report. Requests to meet with the president shall be submitted in writing within five (5) days of the receipt of the report. The president shall meet with the complainant or the respondent within a reasonable time. This meeting may be informal and include other individuals at the discretion of the president. Within a reasonable time the president shall evaluate all evidence presented and make a decision regarding a resolution. This decision shall be in writing and copied to the complainant and the respondent. Such decisions shall include a statement of the right to appeal the president's decision to the Office of Legal Services, Technical College System of Georgia. A total time period from receipt of complaint by the president, to the president's decision should not exceed thirty (30) business days. An appeal of the final decision of the president may be submitted in writing to the Office

of Legal Services at the Technical College System of Georgia. TCSG will contact the complainant and prepare a timeline for resolution of the appeal.

#### **Other Student Non-Academic Complaints or Appeals**

Any person with a complaint or appeal not addressing equal opportunity, gender/ sexual harassment, academics, or student discipline (found in the Handbook) should forward the complaint and any clarifying information to the appropriate vice president. The appropriate vice president will investigate the complaint to determine its validity. This would include:

1) A meeting with the student.

2) A meeting with faculty or staff member against whom the complaint was lodged. In case of a complaint regarding procedures, the meeting would be with the individual responsible for the particular program or service in question.

3) Meetings or discussion with other appropriate faculty, staff, or students.

The vice president, upon clarifying the nature of the complaint, should respond in writing to the student lodging the complaint within seven (7) days. The response should include:

- a) Acknowledgment of receipt of the complaint.
- b) A statement regarding action taken.

Copies of the response should be forwarded to:

- a) The faculty or staff member involved.
- b) The student's file.

NOTE: Any complaint or grievance filed against a vice president should be made directly to the college president. Any complaint against a college president should be made directly to the TCSG commissioner.

Georgia Northwestern Technical College Catalog

# Admissions

#### **Admission Policy - Requirements and Procedures**

The admission policy of Georgia Northwestern Technical College ensures that the citizens of Georgia will have equal access to the opportunity to develop the knowledge, skills, and attitudes necessary to secure personally satisfying and socially productive employment.

By design and implementation, the policies and procedures governing admission to Georgia Northwestern Technical College will:

 Be nondiscriminatory to any eligible applicant regardless of race, color, creed, national or ethnic origin, marital status, 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).
 Increase the prospective student's opportunities:

3) Guide the implementation of all activities related to admission to the college and its programs; to student financial aid; and to the recruitment, placement, and retention of students; and

4) Complement the instructional program.

#### BannerWeb System

BannerWeb is the online tool that allows students access to personal and academic information at Georgia Northwestern Technical College. Students may register for courses, pay tuition and fees online, view unofficial transcripts, view schedules and financial aid information. All students can access BannerWeb from the Georgia Northwestern Technical College homepage at www.gntc.edu.

#### Admission Requirements

General admissions requirements for admission into the degree, diploma, or certificate programs are listed below.

#### Note:

All Nursing, Allied Health, and Health Technology programs have additional admission requirements. These requirements are outlined in the individual program curriculum under Academic Affairs, Divisions of Health Technology and Nursing and Allied Health.

#### 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.

#### Education:

A GED® or high school diploma (verified by an official transcript including graduation date and diploma type) will be required for admission to Georgia Northwestern Technical College unless otherwise specified by the program's standards. Home school students may follow an alternative path for admission, described below. High school diplomas from unaccredited institutions, Certificates of Attendance or special education diplomas are not recognized for admission purposes. Students with diplomas from secondary schools located outside the United States must have their transcripts evaluated for equivalency by an approved outside evaluation organization. Applicants who have successfully completed (C or better) a minimum of 30 semester or 45 quarter hours at the degree level may submit official transcripts from all previously attended colleges accredited by an accepted accrediting agency in lieu of a GED® or high school diploma.

In order to be accepted by a Technical College, the applicant must have been awarded a high school diploma from a secondary school that is on the TCSG approved accreditation agency list. Graduates of unaccredited high schools must obtain a GED. Applicants of home schools located in Georgia who did not attend a recognized accredited program must adhere to the following alternative path for admission:

 $\cdot$  Submit a letter from the local superintendent's office verifying that (1) the parent or legal guardian notified the superintendent of intent to home school and (2)that the parent or legal guardian submitted the required attendance reports to the superintendent's office on a monthly basis as required by O.C.G.A. § 20-2-690. · Submit annual progress reports or a final transcript for the equivalent of the homeschooled student's junior and senior years. The final progress report should include the graduation date.

Applicants of home schools located outside the state of Georgia who did not attend a recognized accredited program must adhere to the following alternative path for admission:

a) Submit annual progress reports or a final transcript for the equivalent of the home-schooled student's junior and senior years. The final progress report should include the graduation date.

b) Submit SAT or ACT scores that meet the TCSG system minimum requirements.

Presidents of Technical Colleges may waive the GED<sup>®</sup>/high school diploma requirement for those secondary students or those pursuing a GED<sup>®</sup> who are otherwise eligible to enroll in a specific program of study.

Foreign Secondary Education: Graduates of secondary schools or colleges outside the United States must have his or her transcripts translated and evaluated for equivalency by an approved evaluation organization or meet accreditation as specified in the approved list of agencies. The cost of the translation and evaluation of the student's transcript is the responsibility of the student. The evaluation report must be received by the Office of Admissions directly from the evaluation organization and may not be submitted by the student directly. If a foreign secondary transcript is not attainable, possession of a GED<sup>®</sup> is acceptable.

#### **Placement Scores:**

Applicants for all degree, diploma, and selected certificate programs must take the placement test or provide official documentation of a course grade of "C" or better in credit-level English and mathematics taken from an accredited college or postsecondary institution; or submit acceptable ASSET or COMPASS scores, taken within five (5) years of the time of application.

#### **Program Entrance Requirements**

Unless otherwise indicated in a specific program, the following entrance requirements will be adhered to for each program offered at GNTC:

Entrance Date: Beginning any semester

Age: Minimum of 16 years of age Education: High school diploma or GED<sup>®</sup> is required Assessment Results: Applicants must achieve minimum scores in reading, writing, and numeric skills on the placement test. Applicants not achieving the minimum scores will receive remedial instruction through the Learning Support program at GNTC. Previous training and/or education may be

#### evaluated to provide advanced placement into the program.

#### **Admission Procedures**

1) Submit a completed Application for Admission along with a \$15 non-refundable application fee. If paying by check or money order, make payable to Georgia Northwestern Technical College.

2) Submit an official transcript from an accredited high school or official GED<sup>®</sup> transcript. Official transcripts must be sent directly from the issuing school or agency to Georgia Northwestern Technical College.

3) Submit transcripts for all colleges and technical colleges attended for credit. All official transcripts must be sent directly from the issuing school or agency to Georgia Northwestern Technical College.

4) Take a placement exam, submit SAT, ACT, ASSET or COMPASS scores or transfer college credit from an accredited college or postsecondary institution.

5) Applicants for certain health programs are required to complete additional admission procedures. These requirements are outlined in the individual program curriculum under Academic Affairs, Divisions of Health Technology and Nursing and Allied Health.

6) An orientation program must be attended by new students and by former students absent from Georgia Northwestern Technical College more than one year. The orientation program is designed to acquaint students with college policies, procedures, and services.

Note: Test scores submitted must meet standard program requirements and must have been taken within the previous five (5) years. Scores must meet the program level requirement. If scores are not appropriate, applicants will be required to take a scheduled placement test.

#### **Transient Student Admission Requirements**

A student in good standing at another accredited institution may be permitted to enroll as a transient student on a space-available basis in order to complete work to be transferred back to the student's parent institution. Transient students must do the following:

1) Submit an application for admission and pay a \$15 application fee to Georgia Northwestern Technical College.

2) Present a transient letter from the Registrar or Academic Dean of the parent institution verifying that the student is in good standing and noting the specific course(s) to be taken at Georgia Northwestern Technical College, is program ready, and is eligible to return to that institution. Note: A transient letter is good for one semester only.

#### **Transfer Student Admissions**

Applicants to Georgia Northwestern Technical College who have previously been enrolled in one or more institutions of higher education and who wish to enroll in a credit program will be considered for transfer admissions. Applicants for transfer admission must meet the following requirements prior to their planned enrollment. A transfer student must submit the following to the college's Office of Admissions:

- 1) A completed application form;
- 2) A \$15 non-refundable application fee;

3) An official high school transcript or GED<sup>®</sup> diploma; (See Education section of Admissions Requirements.)

4) Official transcripts from previous institutions of higher education attended that document coursework for which applications seek credit with passing grades of C or better; and

5) Satisfactory scores on the ASSET Placement Test, SAT, ACT or COMPASS. A student who has satisfactorily completed, with a C or better, transferable English or mathematics courses may be exempt from taking a placement examination. These courses must be equivalent to the entry-level English or mathematics courses required in the applicant's chosen program of study.

A transfer student is admitted to the college:

- 1) In good standing if the student was in good standing at the former institution;
- 2) On probation if the student was on probation at the former institution.

#### **Readmission of Former Students**

Students who are absent from Georgia Northwestern Technical College for one full year or more will be required to complete the following steps:

1) Submit a completed application form to the Office of Admissions;

2) Meet the college's general admission requirements at the time of readmission; and

3) Submit official transcripts from all institutions of higher education attended since the last period of enrollment at the college.

#### Application Deadlines

Applicants are encouraged to apply as soon as possible to meet each semester application deadlines.

#### **Admission Status**

Admission to Georgia Northwestern Technical College will be in one of the following categories: Regular (Program Ready), Provisional, Learning Support, Special or Transient.

**Regular (Program Ready):** All admission requirements have been met to enter a selected program. The student is eligible to take all the courses in the program curriculum. Regular admission of transfer students is contingent upon his or her meeting all the regular admission requirements and being in good standing at a regionally accredited diploma or degree granting institution.

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

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

**Learning Support:** Applicants who score below the provisional cut scores in English, math and reading are granted learning support status or referred to Adult Education. Students with Learning Support status may not take occupational courses until achieving Provisional status. Students with this status are not eligible for federal financial aid (i.e. Pell, SEOG, or Federal Work Study).

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

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

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

## **Placement Test**

The purpose of placement testing is to ensure that a student has the academic skills necessary to succeed in the chosen program of study. Minimum test score requirements are established based on statewide standards. Applicants for all degree, diploma, and selected certificate programs must take the ASSET or COMPASS placement exam unless they can provide exemption documentation. (See Exemption from Placement Testing.) Reasonable accommodations are made during testing for those who have a documented need. The examiner should be notified prior to testing and provided with documentation if special accommodations are needed.

# **Exemption from Placement Testing**

Applicants providing official documentation of acceptable ASSET or COMPASS scores, taken within five years of the time of application; submit acceptable ACT or SAT or scores taken within five years of application; or official documentation of a course grade of "C" or better in credit-level English and mathematics taken from an accredited college or postsecondary institution may be exempt from testing.

## **Required Minimum Scores for Regular admission are:**

# Associate Degree

**ASSET:** Reading Skills 41, Numerical Skills 39, Writing Skills 42, Elementary Algebra 45

**COMPASS:** Reading Skills 80, Numerical Skills 40, Writing Skills 63, Algebra 42 **SAT:** Critical Reading 450, Math 440 **ACT:** Reading 17, English 16, Math 19

# Diploma/Technical Certificate of Credit\*

 \*\*See exceptions below.
 ASSET: Reading Skills 39, Numerical Skills 38, Writing Skills 38, Elementary Algebra 40
 COMPASS: Reading Skills 74, Numerical Skills 36, Writing Skills 38, Algebra 33\*\*\*

SAT: Critical Reading 430, Math 400

ACT: Reading 13, English 12, Math 17

\*Technical Certificates of Credit (TCC) which have Associate of Applied Science (AAS) courses as part of the curriculum use the COMPASS scores for AAS programs.

\*\*Commercial Truck Driving certificate requires: ASSET: Writing Skills, 29; Reading Skills, 29; and Numerical Skills, 29 COMPASS: Writing Skills, 15; Reading Skills, 46; and Numerical Skills, 17.

\*\*Basic Law Enforcement certificate requires: ASSET: NA

COMPASS: Writing Skills, 23; Reading Skills, 70; and Numerical Skills, 17.

\*\*\*Algebra score is required only for those programs that require algebra.

# **Ability-To-Benefit Examination**

An applicant who does not possess an acceptable high school diploma or GED<sup>®</sup> and who wishes to apply for federal financial aid may demonstrate eligibility for entry to those programs not requiring a diploma/GED<sup>®</sup> if the applicant achieves acceptable scores on the placement test. The Office of Admissions will make arrangements to have the test offered at specific times at no cost to the applicant.

# Time Limitation for Program Completion

Georgia Northwestern Technical College will accept course credits from regionally and nationally accredited institutions of higher education without time constraints, except in some health programs. The institution does not limit the amount of time it will honor coursework taken at the college, except in some health programs. However, at the discretion of a student's advisor, students may be required to repeat coursework where the course content has changed significantly. There is no minimum amount of time in which a program of study must be completed. The typical minimum program length is listed in the Curriculum section of this catalog. A student must take 25 percent of his or her program at Georgia Northwestern Technical College; however, the 25 percent requirement will be waived if the student completed a program for which standards have been implemented within the Technical College System of Georgia.

# **High School Initiatives**

High school initiatives allow qualified students to maximize their education and training time by beginning college while they are still in high school. Qualified students may earn credit at the college only, or they may earn credit concurrently at both the college and high school.

## **Dual Enrollment – HOPE**

The Dual Enrollment program is a collaborative effort between the Georgia Department of Education (DOE) and the Technical College System of Georgia (TCSG). The purpose of the Dual Enrollment program is to offer additional educational opportunities for high school (secondary) students and allows them to earn credit from their high school and Georgia Northwestern Technical College while they are still in high school.

# **Dual Enrollment – ACCEL**

The purpose of the ACCEL program is to provide Georgia high school junior and senior students with the opportunity to earn associate degree-level credit hours as they simultaneously meet their high school graduation requirements. In order to be eligible for Dual Enrollment – ACCEL, the high school student must be enrolled in associate degree level (core graduation requirements for college preparatory) English, math, social studies, or science. If a high school junior or senior believes he/she may be eligible for this program, the student will need to contact his/her high school guidance counselor for the application and any additional information needed. This application has to be completed every semester prior to the student's enrollment in the class. Dual enrolled students are offered the same status on the Georgia Northwestern Technical College campus as any other student, including eligibility for academic honors and participation in student activities. The student must adhere to the following admission regulations:

- 1) Be at least 16 years of age;
- 2) Complete a Georgia Northwestern Technical College Application for Admission;
- 3) Meet all testing requirements for regular admission status in chosen program;

## Joint Enrollment

The Joint Enrollment program allows high school students to take courses at Georgia Northwestern Technical College and receive college credit, while still enrolled as a high school student. This is an opportunity to begin a college program while still a student in high school. Jointly enrolled students are offered the same status on the Georgia Northwestern Technical College campus as any other student, including eligibility for academic honors and participation in student activities. For more information on joint enrollment, high school students should contact their high school counselor or the high school initiative coordinator at Georgia Northwestern Technical College.

### Move On When Ready

House Bill 149 (Move On When Ready) is an arrangement whereby an eligible student entering eleventh or twelfth grade, who spent the prior school year in attendance at a public high school in Georgia may take all of his or her courses at or through an eligible institution (college, university or public technical college) or a virtual course approved by the State Board of Education and receive secondary credit from his or her high school with the goal of completing graduation and high school diploma requirements.

Move On When Ready provides high school students the opportunity to "jump start" their postsecondary education during their high school years. High school students will be free to "move on" earlier to the next educational level. Students will have an educational alternative other than the traditional high school setting or school day structure. Students can save money on future college costs since most expenses are paid from the local school system funding.

## Early College Program

The Early College Program at Georgia Northwestern Technical College is designed for current high school students. Students accepted into this program must be recommended by high school staff and must meet grade and high school credit requirements. Georgia Northwestern Technical College currently works with high schools in Catoosa County which includes Heritage, Lakeview-Fort Oglethorpe, and Ringgold. Early College students have the opportunity to complete their academic high school coursework while working toward a certificate, diploma, or associate degree. Students choose from any GNTC program within the health, industrial, public service, or business technology fields.

All classes in the Early College Program take place on the Walker County Campus of Georgia Northwestern Technical College. The goal of the Early College program is to assist students in taking and passing the necessary courses to graduate with their class.

## Advanced Technical College Credit (Articulated Credit)

Recent high school graduates may be eligible to receive advanced technical college credit based upon an articulation agreement signed by the school system superintendent and the Georgia Northwestern Technical College president. Local articulation and curriculum alignment agreements are in place to meet the needs of the community. These agreements serve students by facilitating the smooth transition of students from secondary to postsecondary technical colleges, encouraging postsecondary education, and elimination of undue entrance delays, duplication of course content, and/or loss of credit. High school graduates may receive advanced technical college course credit by passing an exemption exam for each course of attempted credit. High school graduates with a "B" grade or better in

a high school articulated class are eligible to take an exemption exam. The following stipulations apply:

• The applicant must meet regular admission status in order to be eligible to receive advanced technical college credit (articulated credit);

• The student must enroll at Georgia Northwestern Technical College within 24 months of their high school graduation date;

• A passing score must be achieved in order to receive credit for the course. For more information on the requirements to earn advanced technical college credit, high school students should contact their high school counselor or the high school initiative coordinator at Georgia Northwestern Technical College.

# **Senior Citizens**

Residents of Georgia who are 62 years of age or older may request a waiver of tuition. This policy applies to regular and institutional credit courses only. It does not apply to continuing education courses, non-credit courses, or seminars. If tuition is waived under this policy, admission will be granted only on a space-available basis. Senior citizens must meet all other admission requirements as specified in the catalog and pay mandatory fees.

# In-State and Out-of-State Students

Out-of-state students will be enrolled only on a space available basis. Georgia residents are given preference. Please refer to the Legal Residence and Residency Status section of the catalog for additional information about determining residency status. Georgia Northwestern Technical College does not charge out-of-state tuition to students living in Alabama and Tennessee. Every effort is made to accommodate as many students as possible.

## **Policy on International Students**

It is the policy of the Technical College System of Georgia that visa status is not a condition for admission to TCSG technical colleges. Prospective students must meet the state approved admissions requirements as outlined for all students. While visa status is not a condition for admission, it is critical information that may be collected for effective student advisement and tuition purposes. International students seeking admission to Georgia Northwestern Technical College must meet the following requirements in addition to the admission procedures for all new students:

1) Furnish an official English translation and evaluation of secondary records and transcripts showing passing scores on native secondary school examinations and completion of the equivalency of a United States secondary school education. If the high school or secondary transcript is unavailable, the student may take the GED<sup>®</sup> test and submit official GED<sup>®</sup> test scores indicating that the student has passed the GED<sup>®</sup> test;

2) Submit satisfactory scores on the ASSET or COMPASS test which will, at the minimum, place international students in 097 course levels or above in reading, English, and math. International students will not be admitted to Georgia Northwestern Technical College if placement scores are lower than 097 course placement in any one of these three academic areas. Applicant will be referred to Adult Education classes;

3) Submit proficiency in the English language;

4) Pay all costs in full when registering for courses if not eligible for financial aid;
5) Present to the Office of Admissions (for photocopying) the original document certifying immigrant or non-immigrant status (resident alien care, Form I-94, refugee care, etc.) for advisement purposes;

6) Foreign students shall be enrolled only on a space available basis and shall not displace an eligible student desiring to enroll who is a Georgia resident.

7) Foreign students pay four times the tuition required for Georgia residents; this applies to non-immigrant personnel. Foreign immigrants who are permanent residents shall pay the same as citizens of Georgia. Georgia Northwestern Technical College is not authorized to issue an I-20M to anyone for a student visa.

### Orientation

All new students and all returning students who have been out over one year must view the online orientation and complete the survey. The link to the online orientation is located on the GNTC website under Future Students. Student Handbooks are presented to each student as a form of orientation to the college's objectives, services, policies, and regulations. The handbooks are available on each campus through the Office of Student Affairs. Georgia Northwestern Technical College Catalog

# Financial Information

# **Financial Information**

# Legal Residence and Residency Status

**Georgia Residents (including Eligible Non-Citizens)** shall pay tuition and fees prescribed by the State Board of the Technical College System of Georgia for in-state students.

**Out of State Students** will pay tuition at a rate two times that charged Georgia Residents.

**Non-Citizen Students** will pay tuition at a rate four times that charged Georgia Residents. These students are not eligible for financial aid.

# **Residency Categories for Purposes of Tuition Rate Determination**

**Georgia Resident:** an individual or the status of such individual who is a United States Citizen or Eligible Non-Citizen and is domiciled in the State of Georgia and meets the instate tuition requirements of the State Board of the Technical College System of Georgia.

**Eligible Non-Citizen:** a person who, in accordance with the Federal Title IV definition, is a United States permanent resident with a Permanent Resident Card (I-551); or a conditional permanent resident (I-551C); or the holder of an Arrival-Departure Record (I-94) from the Department of Homeland Security showing any one of the following designations: Refugee, Asylum Granted, Parolee (I-94 confirms paroled for a minimum of one year and status has not expired); or Cuban-Haitian Entrant. Persons with an F1 or F2 student visa, a J1 or J2 exchange visitor visa, or a G series visa do not meet the definition of an Eligible Non-Citizen.

**Non-Citizen Student:** a person who is not a United States born or naturalized citizen of the United States.

**Out of State Student:** a person who has not established domicile in the State of Georgia for a period of at least 12 months prior to the first day of classes for the term for which the person is intending to enroll.

# **Determining Residency Status of Dependent Students**

A Dependent Student meets the Georgia residency requirements, for purposes of this procedure and the related policies, if his or her parent has established and maintained domicile in the State of Georgia for at least 12 consecutive months immediately preceding the first day of classes of the school term for which the student is seeking in-state tuition, and

- Such student graduated from an eligible high school as defined by TCSG policy located in the State of Georgia;
- or
- The parent claimed the student as a dependent on the parent's most recent federal income tax return.
- A Dependent Student meets the Georgia residency requirements, for purposes of this procedure and related policies, if a United States court-appointed legal guardian has established and maintained domicile in the State of Georgia for at least 12 consecutive months immediately preceding the first day of classes of the school term for which the student is seeking in-state tuition, provided that the appointment was not made to avoid payment of Out-of-State Tuition.

# **Determining Residency Status of Independent Students**

An Independent Student meets the Georgia residency requirements, for purposes of this procedure and the related policies, if he or she has established and maintained domicile in the State of Georgia for at least 12 consecutive months immediately preceding the first day of classes of the school term for which the student is seeking In-State Tuition.

It is presumed that no Independent Student shall have gained or acquired Georgia residency, for purposes of this procedure and the related policies, while attending a TCSG college without clear evidence of having established a domicile in the State of Georgia for purposes other than attending a TCSG college.

# **Retaining/Maintaining Georgia Residency**

**Dependent Students:** If the parent or United States court-appointed legal guardian of a Dependent Student who was correctly determined to meet Georgia residency requirements for the purposes of this procedure and the related policies, establishes domicile outside the State of Georgia, such student shall continue to retain his or her status as a Georgia Resident, for purposes of this procedure and the related policies, as long as such student remains continuously enrolled in a TCSG college.

**Independent Students:** If an Independent Student who was correctly determined to meet Georgia residency requirements, for purposes of this procedure and the related policies, temporarily relocates outside the State of Georgia, but returns to the State of Georgia within 12 months, such student shall retain his or her status as a Georgia resident, for purposes of In-State Tuition.

# **Eligibility for In-State Tuition Waivers:**

Students in the following classifications are eligible for In-State tuition waivers. These waivers do not affect the student's eligibility for the HOPE Scholarship or Grant, except for waivers for military personnel and their dependents as provided for in the GSFC regulations:

•Employees and their children who move to Georgia for employment with a new or expanding industry as defined in OCGA 20-4-40;

•Full-time employees of the Technical College System of Georgia, their spouses, and dependent children;

•Full-time teachers in a public school, a military base, or a public postsecondary college, their spouses, and dependent children;

•United States military personnel stationed in Georgia and on active duty and their dependents living in Georgia;

•United States military personnel, spouses and dependent children reassigned outside Georgia, who remain continuously enrolled and on active military status;

•United States military personnel and their dependents that are domiciled in Georgia, but are stationed outside the State;

•Students who are domiciled in out-of-state counties bordering on Georgia counties and who are enrolled in a Technical College with a local reciprocity agreement;

•Career consular officers and their dependents that are citizens of the foreign nation which their consular office represents, and who are living in Georgia under orders of their respective governments. This waiver shall apply only to those consular officers whose nations operate on the principle of educational reciprocity with the United States. Students in the following classifications are eligible for

•In-State Tuition waivers. These waivers do not affect the student's eligibility for the HOPE Scholarship or Grant, except for waivers for military personnel and their dependents as provided for in the GSFC regulations.

•Alabama and Tennessee residents pay the same tuition as Georgia residents. All other out-of-state residents pay the out-of-state tuition

# **Expenses**

## Application Fee

Students applying for admission to any credit course must pay a one-time, non-refundable application fee of \$15.

Students are charged the following expenses each semester:

### **Tuition:**

See chart and tuition rate information below. Note: Tuition is subject to change.

### **Registration Fee:**

Students taking degree, diploma, or technical certificate course work pay a \$39 registration fee each semester.

## Activity and Insurance Fee

Students taking degree, diploma, or technical certificate course work pay an activity (\$24) and insurance fee (\$6) each semester which provides them with accident insurance and funds projects of the Student Activities Board. Students who are taking all their semester courses online do not pay activity or insurance fees. Any student taking one or more credit classes on campus is covered by student accident insurance.

#### Instructional and Technology Support Fee:

Students taking degree, diploma, or technical certificate course work pay a \$55 instructional and technology fee each semester.

## **Liability Fees**

• EMT and Paramedic Technology liability insurance: \$46.00; other health programs: \$12.00.

• Health Technology programs have additional expenses which vary by program and semester. See additional health technology program information in the Health Technology and Nursing and Allied Health Departments.

# **Tuition Rates**

This fee is the student's share of instructional cost other than consumable supplies. At this time the tuition fee for Georgia Northwestern Technical College is \$75.00 per credit hour up to 15 credit hours. See chart below for tuition based on credit hours taken. Some certificate program tuition varies per credit hour. See information chart below and contact the Office of Admissions for other certificate program tuition fees.

The tuition which a student pays each semester is assessed according to the policies established for all technical colleges governed by the State Board of the Technical College System of Georgia. Tuition is based on the number of semester hours scheduled up to a maximum equal to the cost of 15 semester hours. Note: Tuition and fees are subject to change without notice.

Credit Hours*	Tuition Georgia Resident**	Tuition Out-of State**	Tuition Foreign Nationals
1	75	150	300
2	150	300	600
3	225	450	900
4	300	600	1200
5	375	750	1500
6	450	900	1800
7	525	1050	2100
8	600	1200	2400
9	675	1350	2700
10	750	1500	3000
11	825	1650	3300
12	900	1800	3600
13	975	1950	3900
14	1050	2100	4200
15	1125	2250	4500

\*A full-time student is registered for 12 credit hours or more. A part-time student is registered for fewer than 12 credit hours.

\*\*Alabama and Tennessee residents pay the same tuition as Georgia residents. All other out-of-state residents pay the out-of-state tuition.

\*\*Basic Law Enforcement tuition is \$175 per credit hour for Georgia residents and \$350 for out-of-state students, plus additional fees for background check, fingerprinting, POST application, physical, uniforms, and other items (approx. \$600).

\*\*Commercial Truck Driving tuition is \$125 per credit hour for Georgia residents and \$250 for out-of-state students, plus fees for drug screening, DOT physical, CDL road test, MVR report, and fuel surcharge (approx. \$400).

# Additional Expenses above Tuition and Fees

## Credit by Examination

Students who wish to receive credit by exam will be charged a \$25 challenge fee for each class they wish to exempt. For more information, please read the Credit by Examination section under Academic Information in this catalog.

# **Books and Supplies**

Bookstores are located on Floyd, Gordon, Polk, Walker, and Whitfield Murray campuses. Bookstores have books, supplies, and other items for student purchase. Refunds will be made for books or supplies that are returned in new condition and accompanied by receipts in accordance with the college's book refund policy. The book refund policy will be prominently posted in the GNTC bookstores. No refunds will be made for used supplies and equipment such as cosmetology kits, CDs, tools, and uniforms. Bookstores will arrange for used textbook buybacks during the week of finals each semester. The buyback price is set by the book company facilitating the buyback and is based on the condition of the book, the edition, and the need for the book the following semester.

## Tools

Some programs require that students furnish hand tools. These are areas where a person is expected to have tools upon employment. The required tools may not constitute a complete set but will be adequate to begin work in the field of study.

# FINANCIAL AID

Georgia Northwestern Technical College recognizes that some students need financial assistance. Students at GNTC can look to several areas for financial aid: Federal Pell Grants, Federal Supplemental Educational Opportunity Grant, the Federal Work Study Program, Federal Student Loans, the HOPE Scholarship Program, the HOPE Grant Program, the ACCEL Program and Georgia Northwestern Technical College Foundation Scholarships. GNTC offers the Workforce Investment Act (WIA) and certifies Veterans for Veterans Benefits. Grants and Scholarships do not have to be repaid unless received erroneously. Beginning fall semester 2011, GNTC will offer federal student loans. Refer to the GNTC website for more information.

To be eligible for most financial aid, a student must demonstrate ability to benefit from the course of study or have a high school diploma or equivalent (GED). Students must be accepted into a degree, diploma, or certificate program at the college to be eligible. The Free Application for Federal Student Aid (FAFSA) must be completed each academic year to be considered for any assistance.

Other means of applying for financial aid may be available by contacting the Financial Aid Office. The financial aid academic year begins July 1 and the FAFSA applications are available in January, six months prior. To apply for all aid, a student may complete the FAFSA online at www.fafsa.gov. There is a link to the website on the GNTC website, www.gntc.edu. Please check with the Financial Aid Office for more details on the application process.

All students must have a complete file for awarding of financial aid; therefore, students should allow themselves 4-6 weeks prior to the start of a term to complete the process. After students complete all other required paperwork. Students can check Banner Web for financial aid awards and they will receive award notification letters showing the types and amounts of assistance for which they qualify. The Financial Aid Office uses the student email system to notify students of their financial aid status. The Business Office will mail financial aid checks to those who qualify.

## **Academic Policies for Financial Aid**

Federal and state regulations require the college to establish policies to measure whether students applying for financial aid are in good academic standing and making satisfactory academic progress toward completion of their degrees, diplomas, or certificate programs.

# Satisfactory Academic Progress Policy

A student is required to maintain satisfactory academic progress to remain eligible for financial aid. Georgia Northwestern Technical College uses the following standards to monitor a student's progress toward his or her diploma, degree, or certificate. Satisfactory progress has two components, quality and quantity. Students must meet both standards to remain eligible for financial aid.

# Quality (Grade Point Average Requirements for Federal Aid)

Students must maintain cumulative grade point average (GPA) of at least 2.0 to remain in good standing. Financial aid GPA's will be monitored at the end of each term. A student whose cumulative GPA falls below a 2.0 is placed on financial aid warning for the next term. This will allow a student one term to increase the GPA to the satisfactory level. If, after one term, the GPA remains below 2.0, financial aid eligibility will be lost (placed on financial aid probation) until bringing the cumulative GPA back to the 2.0 level. Students may receive aid while on warning, but will not receive aid while on probation.

# Quantity (Completion Rate for all aid)

There are a maximum number of hours that students may attempt in pursuing their areas of study. These hours are not to exceed 150% of the hours needed for graduation. Since all of our programs have different graduation requirements, the longest program in each category (associate degree, diploma, or certificate), will be used to calculate the maximum time frame. In order for students to graduate within this maximum "time frame" of hours, at the end of each term they are expected to have cumulatively completed at least 66.6% of their credit hours. For example, a student who attempts 15 credit hours his/ her first term in school would be expected to successfully complete 10 hours for that term. If the student took 15 more credit hours the second term, he/she would be expected to have completed 20 hours at the end of the second term. A student, who, at the end of any term, has not successfully completed 66.6% of his cumulative hours attempted, must make up that deficiency the following term in addition to the required minimum number of credits for the current term. A student who fails to make up the deficiency is no longer considered to be making satisfactory academic progress.

Students may re-establish good standing when they have cumulatively completed 66.6% of their attempted credit hours. The following grades (see Grading System) do not count toward successfully completing a course: "F," "I," "W," "WF", "WP," and "IP." For all courses, any combination of these results in no progress, and will be calculated in the completion rate when computing eligibility for financial aid. Repeat courses will be considered as any other class and both grades will count in the GPA. Grades of "F" and "WF" will be counted in computing your GPA. Since an "IP" grade is received after the next term has started, the cumulative GPA will be checked at that time. If a student does not meet the standards at that time, and has received funds for classes, the funds will have to be repaid by the student.

Learning Support courses are graded on an A\* through F\* scale. A grade of A\*, B\*, or C\* will be considered satisfactory completion of a learning support course. A grade of D\* or F\* will be considered unsatisfactory. Grades received for learning support courses are included in the 66.6% hours attempted completion rate, but not in the GPA calculation.

Transfer students accepted by Georgia Northwestern Technical College, but not previously at GNTC, will be classified as maintaining Satisfactory Academic Progress for the first term of attendance. After the first term, the student's grades will be measured in accordance with GNTC's Satisfactory Academic requirements. Students who previously attended GNTC, transferred to another school, then returned to GNTC, will have all of their course work reviewed. If a student fails to meet the qualitative or quantitative standards at the end of a term, the student will be placed on warning. The student will continue to receive financial aid while on warning. However, if the student does not meet the qualitative and quantitative standards by the end of the warning term, he/ she will be placed on suspension. The student can continue taking courses while on probation at the student's expense.

# Policy for Reinstatement of Eligibility for Financial Aid

- 1. A student whose GPA is classified as unsatisfactory can re-establish eligibility when the cumulative GPA reaches 2.0 for all federal-based aid and 3.0 for all state-based aid (state-based aid can only be re-established one time and the student must be at a checkpoint to regain it). Students may re-establish good standing when they have cumulatively completed 66.6% of their attempted credit hours. It is the students' responsibility to report to the Financial Aid Office when they have met both requirements.
- 2. The above requirements to re-establish financial aid will be at the student's expense.

# Financial Aid Appeal Process

Students will be notified of their failure to make satisfactory progress. If the student feels there were extenuating circumstances beyond his/her control that kept him/her from maintaining satisfactory progress, he/she may appeal in writing by completing the Financial Aid Appeal form (supporting documentation must be attached). The financial aid director will refer the appeal to the Appeals Committee for review. Appeal forms are available from the Financial Aid Office or from the college website. Students will be notified of the Committee's decision within two weeks of submitting the appeal.

# Federal Pell Grant (Pell)

Students who demonstrate financial need and are enrolled in an eligible program may be eligible for the Pell Grant. The amount of the grant may range from \$400 to \$5550 per academic year (subject to change), depending on the level of federal funding, cost of education, enrollment status, and the student's Expected Family Contribution, which is taken from the Student Aid Report. Complete eligibility requirements are available from the Financial Aid Office.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Educational Supplemental Opportunity Grant (FSEOG) is for undergraduates with exceptional financial need, that is, students with the lowest Expected Family Contribution, and priority is given to full-time students who receive Federal Pell Grants. There is no guarantee that every eligible student will be able to receive an FSEOG.

## Federal Work-Study

This program allows students to work in on-campus jobs and earn money to pay their educational expenses. Students will typically be paid the federal Minimum Wage and are paid monthly based on the number of hours worked. Students should apply for federal student aid initially, and their eligibility for Federal Work-Study will be determined from their Student Aid Report. Students should contact the Financial Aid Office for more details.

## **Federal Direct Student Loans**

Federal Subsidized student loans and Federal Unsubsidized student loans will be offered starting Fall 2011. Eligibility will be determined from the Student Aid Report received after the student completes the FAFSA.

# HOPE SCHOLARSHIP PROGRAMS

The HOPE Scholarship Programs are administered by the Georgia Student Finance Commission (GSFC) and consist of the Zell Miller Scholarship and HOPE Scholarship for degree programs and HOPE Grant for diploma and certificate programs. Effective fall semester 2011, the HOPE Scholarship and HOPE Grant will pay a percentage called a factor rate of the prior year tuition amount. This amount can change from year to year. Brief summaries of each program are listed below. For full descriptions of each program, visit the Financial Aid Office.

# **HOPE Scholarship**

The HOPE Scholarship is a state funded program available for students who are working toward a degree program. The student must be a Georgia resident and considered a HOPE Scholar. A HOPE Scholar is a 1993 or later high school graduate with a 3.0 or higher Grade Point Average (GPA) from high school. The high schools will notify GSFC of students who qualify. A student who did not graduate as a HOPE Scholar can become a HOPE Scholar after attempting 30/45, 60/90, or 90/135 semester/quarter hours with a 3.0 or better GPA.

To continue receiving the HOPE Scholarship, degree students must maintain a 3.0 GPA at each check point. The student's GPA will be checked after the student has attempted 30/45, 60/90 and 90/135 semester/quarter hours and at the end of each spring term. First-year scholars (less than 30/45 hours) who attend less than full time will be checked at the end of the third term. There is a maximum number of hours that a student can attempt, which is 127/190 semester/quarter hours.

EFFECTIVE FALL 2011: The HOPE Scholarship will pay a HOPE Award Rate of \$60.75 per semester hour. The HOPE Scholarship will no longer pay any amounts toward fees and books. GSFC has implemented a 7-year rule. Students who received HOPE Scholarship prior to Summer Term 2011, are eligible to receive HOPE Scholarship until June 30, 2015, regardless of high school graduation date. First time HOPE Scholarship recipients Summer Quarter 2011 or later are bound by the 7-year rule. Students who had not received a HOPE Scholarship award prior to Summer Term 2011, an expiration date will be set for each student as June 30th of the 7th academic year following his or her high school graduation. For students that graduated from a home school program or received a GED, the date of the student's home school completion/graduate or GED test date will be used as the basis for determining the 7-year expiration date. Students can lose and regain eligibility once beginning Fall Term 2011. Any previous gains/losses prior to Fall Term 2011 will not apply.

## Zell Miller Scholarship

A student who graduated high school with a 3.7 or higher GPA <u>and</u> with SAT score of 1200 or ACT score of 26 on a single administered test is eligible. The Valedictorian and Salutatorian from a high school graduating class are considered automatically eligible, regardless of GPA/SAT/ACT.

Starting Fall Semester 2011, current students will have to meet the GPA/SAT/ACT requirement from high school and have at least a 3.3 GPA at the 30, 60 or 90 semester hour check point of their college coursework.

# **HOPE Grant**

HOPE Grant is a state funded program available for students who are working toward a diploma or certificate program. The student must be a Georgia resident. There is no GPA requirement to start using the HOPE Grant.

EFFECTIVE FALL 2011: HOPE Grant will no longer pay fees or book amounts. No GPA will be checked prior to Fall Semester; however; a student must maintain a 3.0 GPA at the end of Fall if they are at a check point. A student who has reached the 30 or 60 semester hour checkpoint must have a 3.0 GPA to continue on the HOPE Grant. All other HOPE Grant eligible students will not be checked until they reach a check point. The HOPE Grant eligibility can be regained one time. The HOPE CAP of 63/95 semester/quarter hours will apply to all programs.

# **Return of Title IV Funds Policy**

If a student withdraws, (officially or unofficially), any Federal Aid received is subject to the "Return of Title IV Funds." The withdrawal date is the date the Office of the Registrar receives and stamps the withdrawal form (usually the start date of the withdrawal process). A percentage of unearned funds will be returned to the proper fund. The number of calendar days attended during the term is divided by the total number of calendar days in the term. The resulting percentage is multiplied by the student's Title IV (excluding FWS) aid for the term. This is the new amount the student is entitled to receive (paying Pell first). The following formula will be used to determine return of funds:

Number of days attended /number of days in term = percentage (%) earned (Including holidays and weekends)

Earned 100% if greater than 60%, if less than 60% then, 100% - percentage (%) earned = percentage (%) unearned

For more information concerning this policy, please see the Financial Aid Office. If a student registers for two mini sessions and then withdraws from the first mini session, but plans to attend the second mini session of the term, the student needs to notify the financial aid office in writing of his/her intention of returning for the second registered class(s). If the student returns, in this scenario, no Return of Title IV calculation is necessary. If the student does not return, aid must be reduced to pay only for hours attended and Return of Title IV Funds calculation has to be performed, using the original withdrawal date.

## **Rehabilitation Services**

Vocational Rehabilitation cooperates with Georgia Northwestern Technical College by providing financial assistance to students who have disabilities and who qualify for vocational rehabilitation.

## **Veterans' Benefits**

Veterans' benefits are available to qualified veterans and dependents of deceased or disabled veterans. Applicants should contact the financial aid office on the campus of GNTC the student plans to attend in order to obtain an application. Tuition refunds for students receiving veterans' benefits through the Department of Veterans Affairs will be prorated over the length of the course. The fees are non refundable.

# Workforce Investment Act (WIA)

The Workforce Investment Act is a federally funded program available to those who have been displaced from their employment or have very low family income and meet all eligibility requirements and other grant selection guidelines. Meeting all eligibility requirements does not guarantee acceptance into the WIA program. Qualified applicants must maintain a satisfactory Grade Point Average (GPA) and academic progress. The WIA program assists eligible, full-time students with all program required materials such as books and supplies and may assist with tuition and fees. WIA also pays a small travel stipend and assists with child care expenses. All students interested in the WIA program must first apply for Federal PELL Grant and/or the HOPE Grant. To apply for WIA, contact the WIA office at the nearest Georgia Northwestern Technical College campus.

# **Refund Policy**

Georgia Northwestern Technical College can refund 100% of the tuition and refundable fees paid if the student formally withdraws within three instructional days from the first day of the semester. No refunds will be issued after this date. Application fees are not refundable. The business office issues all refund checks by the third week of the semester in which the student withdrew from classes. Refunds will only be issued to students who formally withdraw. This policy applies to all students regardless of the source of fee payments. Georgia Northwestern Technical College Catalog

# Academic Information

# Academic Information

# **Grading System**

Each student's progress, conduct, and attitude are continuously appraised. At the end of each semester, the achievement of each student is reported using the following system of grade assignment. See explanation of grading symbols after listing. Quality points are used in computing grade point average (GPA).

- A =90-100 Excellent (4 quality points)
- B =80-89 Good (3 quality points)
- C =70-79 Satisfactory (2 quality points See note at the bottom of this list.)
- D =60-69 Poor (1 quality point)
- F =Below 60 -Failing (0 quality point)
- AC = Articulated Credit
- AU = Audit Course
- EX =Credit Course Exempted (not computed)
- I =Incomplete (not computed)
- IP =In Progress (not computed)
- TR =Credit Course Transferred (not computed)
- W =Withdrew (by mid-semester) (not computed)
- WP =Withdrew Passing (not computed)
- WF =Withdrew Failing (computed as F, 0 quality points)

Note: A grade of "C" or better is required in a prerequisite course before a student can progress to the next level of instruction. A minimum average of "C" (2.0 GPA) is required for graduation.

**"EX" Credit by Examination:** Upon request and approval, an exemption test may be administered to a student to determine if the student has already gained mastery of the course competencies (See Credit by Examination under Academic Information found in the college catalog). If the student achieves satisfactory performance on the exam, a grade of "EX" will be recorded. The "EX" grade carries no grade points, but credit hours will be given identical to the number of credit hours normally assigned to that course at the college.

**"AU" Audit:** "AU" indicates the course was taken for no credit. By auditing a course, the student is allowed to attend class without meeting admission requirements and does not receive a grade or credit. Students who audit courses must pay regular tuition, admission, and registration fees. Students are not allowed to change from audit to credit status or from credit to audit status once the term has begun.

"AC" Articulated Credit: "AC" indicates course credit awarded for selected high school classes that meet the Advanced Technical College Credit criteria based on agreement with a high school.

**"I" Incomplete:** "I" indicates that the student who is performing satisfactory work is unable to meet full course requirements for nonacademic reasons, circumstances beyond the control of student or instructor. An "I" is recorded until the final grade is established. The incomplete is assigned only after the student has made arrangements with the instructor for fulfilling the course requirements. An "I" must be removed within one semester, or it will automatically become an "F." Extraordinary circumstances may merit an appeal for extension of time. Extensions of time must be requested by the instructor and approved by the Office of Academic Affairs.

**"IP" In Progress:** "IP" indicates that a final grade could not be posted because the student was not scheduled to complete the course by the end of the semester. An "IP" must be followed by a final grade during the next semester or it will automatically become an "F".

**"TR" Transfer Credit:** "TR" indicates that the student has successfully completed the course at another postsecondary institution. A grade of "TR" carries no quality points. The student will, however, receive comparable credit hours at the college for the credit hours received at the former institution.

**"W" Withdrawal:** "W" indicates that a student was permitted to withdraw from a course without academic penalty. Withdrawal without penalty will not be permitted past the midpoint of the semester.

**"WP" Withdrew Passing:** "WP" indicates that a student making satisfactory progress was permitted to withdraw from a course or was administratively withdrawn after midpoint of instruction without academic penalty.

**"WF" Withdrew Failing:** "WF" indicates that a student was permitted to withdraw from a course or was administratively withdrawn after midpoint while making unsatisfactory progress. The dropping of a course under these circumstances is equivalent to a grade of "F."

**"\*" Learning Support Class:** A letter grade followed by an asterisk (\*) indicates a learning support course. This grade will not be calculated in the Academic GPA, but will be calculated in the student's financial aid GPA for the Hope Scholarship program.

## Semester Grade Point Average

Students will be awarded quality points for each credit course grade according to the following scale:

- A = 4 Quality Points
- B = 3 Quality Points
- C = 2 Quality Points
- D = 1 Quality Point
- F = 0 Quality Points

The quality points awarded are then multiplied by the credits for that course to get the quality points earned for the course. Quality points earned for all semester courses are then totaled and divided by the total credits for the semester to obtain the semester grade point average (GPA). Grades of "W" and "WP" are not counted in the cumulative GPA. Hours transferred to GNTC via course exemption and/or prior credit for training are not counted in determining the GPA. Grades of "WF" will be recorded and calculated as an "F" in the GPA. Courses taken through the Learning Support Department will not affect GPA.

## **GPA Computation Example**

Grades Quality Points X Course Credit Hours = Total Quality Points for Course A in a course gives 4 quality points X 5 credit hour course = 20 total quality points for course. (4x5=20)

B in course gives 3 quality points X 10 credit hour course = 30 total quality points for course. (3x10=30)

C in course gives 2 quality points X 5 credit hour course = 10 total quality points for course.  $(2 \times 5 = 10)$ 

Total Quality Points for Semester = 60 (20+30+10)Total Quality Points for Semester ÷ Total Credit Hours for Semester = Semester Grade Point Average; therefore,  $60 \div 20 = 3$  (Semester GPA).

## **Cumulative Grade Point Average**

A student's cumulative Grade Point Average (GPA) is the average of all grade points earned at the college. This average is calculated in the same manner as the semester GPA (See GPA Computation Example), but includes all attempts at all credit courses taken at the College. The cumulative GPA is recorded on the student's permanent record.

# Work Ethics Grade

A code of ethics is basic to all cultures, groups, and professions. Ethics provide guidelines for living and performing, and they serve as the basis for making difficult decisions. Classroom instruction on ethical work standards is, therefore, provided in each course, and students receive the opportunity to practice these ethics in an educational setting before they enter the workplace.

Each student is evaluated twice each semester in terms of his or her work ethic: at midterm and at the end of the semester. This evaluation is reflected in a separate grade on a student's transcript. Attributes measured as a part of work ethics are attendance, character, teamwork, appearance, attitude, productivity, organizational skills, communication, cooperation, and respect. Students in online classes also receive work ethics grades. Attributes measured are those appropriate to online instruction. Grading scale is as follows: 3=Exceeds Expectations; 2=Meets Expectations; 1=Needs Improvement; and 0=Unacceptable. Work Ethics grades are not given in Learning Support classes

## **Grade Reports**

Grade reports are posted to the Banner Web approximately one week after the final examination period. Students can check their grades at www.gntc.edu. Grades will not be given out by phone or by email.

## **Grade Appeals**

If there is a dispute over the final grade awarded for a particular course then the student has ten (10) business days from the time he/she could reasonably be aware of the final grade to contact the instructor in writing about the disputed grade. This "reasonable time" is defined as starting once grades are posted and made available to students on the institution's electronic records web page.

# **Good Academic Standing**

A student is considered to be in good academic standing if he/she maintains a cumulative GPA of 2.0 or higher. A cumulative GPA of 2.0 or higher is also required for graduation.

# Academic Probation and Suspension

Any student who earns a semester GPA of less than 2.0 will be placed on academic probation during the next semester of enrollment. A student placed on academic probation must meet with his/her advisor to develop intervention strategies. A student will be suspended for one semester if the semester GPA falls below a 2.0 for two consecutive semesters. When a student is suspended, that student is not allowed to enroll in classes for the next term. During the first semester of enrollment after academic suspension, a student is placed on academic probation. A student is removed from academic probation by earning a semester GPA of 2.0 or higher.

# Drop/Add Period

A student may drop one or more courses without penalty within the first three consecutive instructional days of any semester, as long as the student remains in at least one course. The student may add one or more available courses without penalty within the first seven instructional days of any semester. To drop or add a class during the designated drop/add period, the student may log on to the Student Information System or complete a Change of Registration form. In the case of extenuating circumstances, students who need to change sections of a class after the drop/add period must obtain permission from the vice president of academic affairs. If dropping or adding a class changes a student's status from full-time to part-time or part-time to full-time, the student must notify his/her Financial Aid Counselor. Any student who enters a course after the first day of class is required to complete all missed work as required by the course instructor.

# Withdrawal from Courses

After the third consecutive instructional day, any student withdrawing from a course will receive a grade of "W" through the midpoint of the semester. Faculty will assign students withdrawing after that date either a WP – withdrew passing or WF – withdrew failing. The last date which a student may officially withdraw from a class and receive a WP/WF is posted on the academic calendar. A student who wishes to withdraw from a course(s), but does not want to totally withdraw from the college, must obtain a Change of Registration form available from the Registrar's Office/Student Affairs Office. A student who stops attending class but does not officially withdraw may receive a failing grade and/or loss of financial aid.

# Withdrawal from the College

To officially withdraw from the college, the student must obtain a withdrawal form from the Office of Student Affairs, complete the form, and return it to that office. Failure to do so may result in a failing grade and/or loss of financial aid.

# Dean's List

A semester GPA of 3.5 to 3.79 with a course load of at least 12 credit hours will place a student on the Dean's List for that semester.

# **President's List**

A semester GPA of 3.8 or higher with a course load of at least 12 credit hours will place a student on the President's list for that semester.

# Graduation

Students are eligible to graduate when the following requirements are met:

1) The technical certificate of credit (if required), diploma or associate degree seeking student has earned a high school diploma or a GED;

2) The required number of credit hours and courses in the student's program of study has been satisfactorily completed, and the student has a minimum cumulative GPA of 2.0;

3) An application for graduation (obtained in the Registrar's Office or the Georgia Northwestern Technical College website) must be completed and submitted to the registrar no later than the end of the semester prior to the semester of the student's anticipated graduation;

4) Program area exit examination has been completed (if required); and

5) At least 25% of the credit hours required for graduation have been earned at Georgia Northwestern Technical College. No more than 75% of the credit hours required for graduation may be earned by transfer of credit, credit by examination,

or articulation.

Honor graduates are recognized during the commencement ceremony.

# Commencement

Commencement ceremonies are held twice a year. For more detailed information, please visit the graduation page at www.gntc.edu under Student Services and Registrar.

High Honor Graduate Cumulative GPA of 4.0 Honor Graduate Cumulative GPA of 3.5 -3.99

Students who re-enroll in the college after an absence of 12 consecutive months or more and who are seeking a degree, diploma, or certificate must meet the graduation requirements as stated in the GNTC Catalog and/or Student Handbook which is in effect at the time of re-enrollment. Students may meet graduation requirements at the end of each semester.

# **Residency Requirement**

Although advanced placement credit is encouraged, Georgia Northwestern Technical College requires that all students graduating from the college must complete a minimum of twenty five percent (25%) of the course work needed for graduation from GNTC. The 25% requirement will be waived if the student has completed a program for which standards have been implemented within the Technical College System of Georgia. Transfer students must complete a minimum of 25% of their required course work at Georgia Northwestern Technical College before being issued a degree, diploma, or certificate. No more than 75% of the credit hours required for graduation, or articulation. Credit awarded as part of an articulation agreement or awarded based upon corporate/industrial or third party certification, must be validated by the credit-by-examination process in place at the college.

## **Full-Time Students**

Individuals pursuing 12 credit hours or more during a semester are considered to be full-time students.

## **Part-Time Students**

Part-time course work may be undertaken in any program of study. Students who take fewer than 12 credit hours per semester are considered to be part-time.

## **Maximum Class Load**

The maximum number of credit hours that a student may carry in one semester without special permission from the Office of Academic Affairs is 20.

## Program Length

A student who enters a program of study as Program Ready and who takes 15 credit hours per semester can typically finish a program of study in the following number of semesters:

Associate Degree: Four semesters Diploma: Three semesters Certificate: Two semesters

However, students should always confer with their advisor to plan their semesters carefully to ensure they are sequencing their courses correctly.

Note: Due to accrediting or licensure issues, some programs require more semesters than the norm.

### **Academic Advisors**

At the time of enrollment, each student will be assigned an academic advisor. The advisor's role is to offer counsel regarding the student's program of study, to make referrals to other services, to provide academic guidance when transferring to other institutions, and to help students monitor their academic progress realistically. Before registering, students are required to meet with their advisors.

With the advent of distance education via the Internet, some students may choose to take one or more classes online and never meet their instructors in person. Online students are still assigned advisors just as campus-based students and are required to communicate with their advisors before registering for classes. Communication with the advisor can be accomplished in person, by telephone, or online. Contact information for faculty is available at the college's website, www.gntc.edu, or a student may call GNTC at 706-295-6963 and ask to speak with or leave a message for a faculty member.

#### Attendance

Absences seriously disrupt a student's orderly progress in a course and significantly diminish the quality of group interaction in class. Although an occasional absence may be unavoidable, in no way is the student excused from meeting the requirements of the course when he/she is absent. A student absent from class is still responsible for preparing assignments for the next class and completing the work missed. When a student must be absent, it is imperative that the absence is handled in a responsible and professional manner and communicated to the instructor. An instructor will have his/her specific attendance policy in his/her syllabus and/or program handbook. It is imperative that students read and follow the syllabus information. Failure to follow the attendance policy could result in administrative withdrawal, decreased work ethics evaluation, decreased course academic evaluation, and failure of course.

## **Declaring a Major**

At Georgia Northwestern Technical College, each degree and diploma program requires students to progress through the following instructional course categories in a developmentally valid sequence:

- 1) General Core Curriculum;
- 2) Occupational Curriculum.

Students are encouraged to enroll in a combination of general education courses and occupational courses. Each degree or diploma program complies with program admission standards and competency prerequisites established in the relevant program-specific standards. Students are required to complete prerequisite courses prior to enrolling in subsequent courses.

#### **General Core Curriculum**

The general education courses for the degree programs provide the foundations in Language Arts/Communication, Social/Behavioral Sciences, Natural Sciences/ Mathematics, and Humanities/Fine Arts.

# **Occupational Curriculum**

Occupational courses are those technical courses that form the majority of the student's program of study. The specific content of the major is determined by the curriculum requirements of each program.

## Associate Degree Programs

Each student seeking an associate degree at the college is required to satisfactorily complete at least 15 hours in general education that provide the foundations in Language Arts/Communication, Social/Behavioral Sciences, Natural Sciences/ Mathematics, and Humanities/Fine Arts. The purpose of the general education courses at GNTC is to provide students with a common, broad-based, well-rounded, collegiate level educational experience that ensures breadth of knowledge and adheres to a coherent rationale.

## **Diploma Programs**

Each student completing a diploma program at the college is required to satisfactorily complete at least eight credit hours in diploma basic skills courses. For the diploma-seeking student, that course of study typically consists of an appropriate course in mathematics, English, and psychology. This requirement is based upon the belief that to be well-trained is not enough. Today's technician must also be competent in the use of written and spoken language, possess adequate computational skills, and have good interpersonal skills.

## **Online Classes**

An online course is one delivered over the Internet using Angel Learning Management System (LMS) through the Georgia Virtual Technical Connections. Hybrid courses use the LMS and also meet on campus part of the time. Webenhanced classes meet on campus the required time but have some components in the LMS.

- <u>Online</u>-the course is entirely online and communication with your instructor is done via email and course software.
- <u>Hybrid</u>-the course is taught partially online and on campus. At least 51% of the instructional time will be on campus. This structure offers the opportunity to be in the classroom for personal communication.
- <u>Web-enhanced</u>-all meetings are on campus, but many components of the course, like the syllabus, assignments, etc. can be found online.

Students are issued a username and password which should be kept confidential and never passed to another student or family member.

## **Course Substitution**

The college will permit substitution from the prescribed curricula only under unavoidable or exceptional circumstances. In order to request a deviation from the prescribed course of study, the student should first consult an advisor in that program area. If the student is advised to pursue the course substitution, the advisor will obtain a Course Substitution Form from the student affairs office. On this form, the student will describe the substitutions sought and the reason for making that request. Course substitution must be approved by the advisor.

## Auditing a Course

A student who wishes to audit a course must complete an application for admission and pay the application fee. Students who audit a class will receive an "AU" grade in the course and will not have the grade computed in the term or cumulative grade point average. Students who register to audit a class:

•Are not allowed to receive credit for the course (however, students will be permitted to re-register for the course for credit in a subsequent term);

•Are required to complete a Request to Audit Form at the time of registration;

•Are not permitted to change from audit to credit or from credit to audit after the Drop/Add period for the term;

•Are cautioned to be aware that courses taken on an audit basis may not be used for certification of enrollment for many forms of financial aid or other benefits;

•Students must meet all prerequisites for the courses they audit.

•Are required to pay regular tuition and fees and are subject to the same instructional requirements as other students in the class. Financial aid will not cover classes being audited.

# Change of Major (Program Transfer)

Students have the privilege of transferring from one program to another while enrolled in Georgia Northwestern Technical College. In the event a student declares a change of major, the student's placement test scores and previously earned credits will be evaluated in terms of the new major. In some instances a change of major will result in additional general education course work. The student must meet admission requirements and any other qualifications for the new major. Students desiring to change their majors should complete a Change of Status form available in the office of student affairs. Students may change their major prior to the semester starting and no later than the first five instructional days of the semester. Some programs may have waiting lists and may not be available for immediate entry.

## **College Transfer**

Under an agreement with the Board of Regents (BOR) of the University System of Georgia, the following GNTC courses will transfer to a BOR college: ENG 1101, ENG 1102, ENG 2130, ECO 1101, PSY 1101, SOC 1101, SPC 1101, MAT 1101, MAT 1111, and MAT 1113.

Students wishing to have other courses transferred to a BOR college, or are planning to transfer to a non-BOR college, must contact the receiving college to determine if the courses will be accepted for transfer.

## **Transient Student Approval**

Transient student status is available for current Georgia Northwestern Technical College students wishing to attend another accredited institution to complete courses for transfer back to GNTC.

Transient Status Requirements:

1. Student must have at least a 2.00 cumulative grade point average and be in good standing.

- 2. Course(s) must be required for student's current program of study at GNTC.
- 3. Student must have no "holds" at GNTC.
- 4. Student must meet any pre-requisite or test score requirements.

5. Student must be a current student (must have attended GNTC within the past 12 months) or submit an admissions application to the admissions office for the current term.

Note: If the request is for transient classes on-line at another Technical College System of Georgia (TCSG) institution, a student must apply through the Georgia Virtual Technical College (GVTC) at www.gvtc.org. Students must adhere to the deadline for transient students by the host college as they may differ from GNTC. Current GNTC students wishing to take an on-campus course at another TCSG institution or at an accredited college or university may complete a Request for Transient Status form and submit it to the registrar's office on any GNTC campus. Upon approval, a transient letter will be sent to the requested institution.

## **Class Cancellation**

The college reserves the right to cancel any class with insufficient enrollment.

# **Course Prerequisites**

Course prerequisites listed in the Catalog must be met before advanced courses may be taken. Students must earn a grade of "C" or better in a prerequisite course in order to take the higher level course.

# **Credit by Examination/Exemption Tests**

If circumstantial evidence, such as experiential learning, indicates the probability of special technical aptitude or knowledge on the part of the petitioning student, a written, oral, and/or performance examination can be given. The following exemption tests are administered by appointment for persons wishing to establish credit by examination in one or more of the following subjects:

ALHS 1011 -Anatomy and Physiology (Only Available on Floyd and Walker Campuses) ALHS 1040\* -Introduction to Health Care (Only Available on Floyd and Walker) ALHS 1090 -Medical Terminology for Allied Health Sciences (Only Available on Floyd and Walker)

CIST 1001 - Computer Concepts

CIST 1130 - Operating Systems

ENGL 1010 - Fundamentals of English I

MATH 1011 - Business Math (bring a calculator)

MATH 1012 - Foundations of Mathematics (bring a calculator)

MATH 1013 - Algebraic Concepts (bring a calculator)

COMP 1000 - Introduction to Computers (Both a Written and Skills Component) \*ALHS 1040 is a two-part test. The tester will take the written portion first. If he/ she is successful, an appointment will be made for the tester to complete physical checkoffs, the second portion of the test. In addition, the tester must present a valid CPR card at the time of testing.

Exemption of other courses may be available upon request (see advisor). Be aware that a significant amount of course knowledge is needed in order to pass the exams with 80% which is required to receive credit for the course. If 80% is achieved, the student will receive an "EX" as the grade, indicating that he/she received the credit through an exemption test. The "EX" carries no grade points, but the number of credit hours normally assigned to the course will be awarded.

The following rules apply to those wishing to establish credit by examination (exemption test):

1) A person who wishes to take an exemption test must make an appointment in advance by calling the following person at the campus where he/she wishes to test:

Floyd County Campus: Bonnie Moore	706-295-6889
<ul> <li>Gordon County Campus: Melinda Sams</li> </ul>	706-624-1122
<ul> <li>Polk County Campus: Anu Moorthy</li> </ul>	678-757-2043
Walker County Campus: Susan Martin	706-764-3674
<ul> <li>Whitfield Murray Campus: Brittany Richardson</li> </ul>	706-272-2966

2) A student must be registered at GNTC in order to register for an exemption test;

3) A student may not change an existing grade of "D" or "F" on his/her transcript by taking an exemption test;

4) A student has one opportunity to pass an exemption test per available course. If he/she fails to pass the exemption test on the first try, he/she may not repeat the test later for a second try;

5) A student who has previously registered for a course may not take an exemption test for that course;

6) A student must pay \$25, payable at the GNTC Office of Administrative Services, at the time of testing. Payment may be by cash, check, or debit/credit card;

7) Exemption tests are given by appointment from 9:00 a.m. – 2:00 p.m. as follows:

Floyd Campus, Walker Campus and Whitfield Murray Campus each Friday; Gordon Campus each Tuesday; Polk Campus each Wednesday.

## **Competency Tests**

Competency tests are administered by appointment for persons wishing to establish credit for courses they have taken, for which they received a grade of "C" or better, but have exceeded the course validity limit. Course validity limits for Health Technologies and Nursing and Allied Health Technologies programs can be found in this catalog. These courses may be transfer courses or courses taken at GNTC. The competency test establishes that they still retain aptitude in that subject.

The following rules apply to the student wishing to take a Competency Test:

1) A student wishing to take a competency test must register to take the test with one of the following people.

• Bonnie Moore, Floyd County Campus, bmoore@gntc.edu, or telephone 706-295-6889

• Denise Grant, Walker County Campus, Dean of Nursing and Allied Health, dgrant@gntc.edu, or telephone 706-764-3532

• Fran Shugars, Walker County Campus, fshugars@gntc.edu, or telephone 706-764-3520

2) A student must be registered at GNTC in order to register for a competency test;

3) A student may not change an existing grade of "D" or "F" on his/her transcript by taking a competency test;

4) A student has only one opportunity to pass a competency test per available course. If he/she fails to pass the competency test on the first try, he/she may not challenge the test later for a second try;

5) A student must pay \$25, payable at the GNTC Office of Administrative Services, at the time of testing. Payment may be by cash, check, or debit/credit card.

6) Competency tests are given on Fridays on the Floyd County Campus by appointment only and Monday through Friday on the Walker County Campus by appointment only.

# Competency Tests are available for the following subjects:

- ALHS 1011 Anatomy and Physiology ALHS 1040\* - Introduction to Health Care ALHS 1090 - Medical Terminology for Allied Health Sciences
- ALHS 1126 Health Science Physics
- ALHS 1127 Health Sciences Chemistry
- BIOL 2113 Anatomy and Physiology I
- BIOL 2114 Anatomy and Physiology II
- BIOL 2117 Introduction to Microbiology
- BUSN 1140 Document Production
- CHEM 1211 Chemistry I
- MATH 1012 Foundations of Mathematics (bring a calculator)
- MATH 1013 Algebraic Concepts (bring a calculator)
- MATH 1111 College Algebra (bring a calculator)

\*ALHS 1040 is a two-part test. The tester will take the written portion first. If he/ she is successful, an appointment will be made for the tester to complete physical checkoffs, the second portion of the test. In addition, the tester must present a valid CPR card at the time of testing.

# **Standardized Exam Credit**

Georgia Northwestern Technical College may award credit based on nationally normed exams, including, but not limited to, the following:

1. CLEP—Credit may be awarded for successful completion of an appropriate CLEP (College Level Examination Program) subject area examination. Credit is awarded based on score recommendations of the Council on College Level Services.

2. Advanced Placement Examinations—Credit may be awarded to students who have taken appropriate courses (determined equivalent to courses offered at GNTC) in high school and achieve a score of 3 on the Advanced Placement Examination. The Advanced Placement Examinations are offered by the College Entrance Examination Board.

Note: Time limits that apply to transfer credit apply to credit by exam.

## **Transcript Evaluation**

The college may accept transfer credits from regionally or nationally accredited colleges. A grade of "C" or better is required in order for the credit to transfer. Transfer credit is given only for courses with equivalents at GNTC. In order to receive transfer credit, the student must have official copies of all college transcripts sent to the admissions office. Full credit will be awarded for courses, subject to GNTC assuring that accreditation requirements are met. Transcripts are generally evaluated within two weeks after receipt.

## **Student Responsibilities**

It is a basic and fundamental responsibility of the college to maintain order through reasonable policies and procedures. The filing of an application shall be regarded as evidence of the applicant's intention to abide by the standards and regulations of Georgia Northwestern Technical College. A student forfeits his/her right to remain at the college if he/she fails to comply. A Student Code of Conduct, including the Student Disciplinary Policy and Procedure, may be found in the Student Handbook. Students are responsible for being informed of all policies and procedures required for continued attendance at Georgia Northwestern Technical College. Policies and procedures are generally found in the College Handbook and in the GNTC Catalog. The college's regulations will not be waived because a student pleads ignorance of established policies and procedures. A student who is unsure of any policy or procedure should seek clarification from the office of student affairs.

# Student Rights

Georgia Northwestern 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 GNTC educational programs, course offerings, and activities on campus or any activity sponsored by GNTC off campus in accordance with GNTC 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, course offerings, and activities in accordance with GNTC policies and procedures.

- 3. To develop intellectual, personal, and social values.
- 4. To due process procedures.
- 5. To participate in institutional decision making.

6. To participate in approved student organizations in accordance with GNTC policies and procedures.

7. To privacy as outlined in the Family Education Rights and Privacy Act (FERPA).

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# **Student Services**

The Office of Student Affairs assists students in developing the attitudes and abilities needed to be successful in the occupations they plan to enter.

## **Testing Centers**

A variety of assessments are provided in the Testing Centers located on any of the Georgia Northwestern Technical College campuses. Services include testing for college admission and for career advisement. Testing times can be obtained by contacting any of four the GNTC Testing Centers or visiting GNTC's website at <u>www.gntc.edu</u>.

### Career Planning/Exploration

The Career Planning staff provides career counseling, various career interest assessments, computerized career exploration, and guidance with program selection. The service is free and open to the public. Any adult wishing to add value to his or her life through education may contact a Career Planner on any Georgia Northwestern Technical College campus to make an appointment or may visit GNTC's website at www.gntc.edu.

### Counseling

Georgia Northwestern Technical College provides counseling services for students who need assistance with school-related problems. Referrals are made to outside services as needed.

### Tutoring

Tutoring Services are provided on each GNTC campus. A tutoring schedule of general education courses and several other courses is posted on all GNTC campuses and the GNTC website. At the request of instructors or students, other courses will be considered for tutoring services. These services are offered for day and/or evening students on all campuses, and are also available to students taking courses online through the Georgia Virtual Technical Connection.

### **Career Services**

Career Services provides job assistance for GNTC graduates, alumni, and students. The staff in these offices, along with program faculty, assists students in locating employment in their programs of study or in related fields. Students may also get assistance in finding part-time and full-time employment while in school. Career Services offers a wide variety of services, including career counseling; employment leads on full-time, part-time, and seasonal employment; on-campus recruiting and interviewing services; résumé preparation; interview training; career outlook information; and internet job search information. Career Services also establishes and maintains relationships with area employers who hire or may potentially hire GNTC students and graduates.

## **Services for Special Populations**

Georgia Northwestern Technical College is committed to providing technical education to students with special needs through the Special Populations Program. The two primary purposes of the program are:

- 1) To improve the educational development of special population students;
- 2) To improve the understanding and support of the campus environment.

Special population students are those students who are from economically disadvantaged families, including foster children, individuals preparing for non-traditional fields, single parents, including single pregnant women, displaced homemakers, individuals with limited English proficiency or are physically or mentally

disabled as defined under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, and as defined by Carl Perkins Vocational Applied Technology, who are national origin minority students with limited English skills and non-traditional students.

The Special Populations Program provides special services to include assessment/ testing, career counseling, job-readiness/retention activities, life management workshops, skills training, resume preparation, and money/time management. This program seeks to empower students through activities that eliminate barriers which prevent them from obtaining educational and employment success. Program services are free. For more information, contact the Special Populations Program at 706-802-5040.

# **Students with Disabilities**

Georgia Northwestern Technical College provides a number of services for students with disabilities to assist in equal access in the academic and technical components of their program of study. A disability is described as a condition that impairs or restricts one or more major life activities. Accommodations are extended to students who have:

- Vision or Hearing Impairments
- Learning Disabilities
- Physical Disabilities
- Medical Impairments
- Psychological Impairments
- Supporting Documents

These services include but may not be limited to extra time, note takers, alternate formatted textbooks and files, reading software, screen magnifiers, digital recorders, interpreters, adaptive keyboards, assisted listening devices, and closed-caption televisions.

Georgia Northwestern Technical College is in compliance with the rules and regulations for the administration of Section 504 of the Rehabilitation Act of 1973, the 1990 Americans with Disabilities Act, (ADA) and the 2008 American with Disabilities Act Amendments Act, (ADAAA). An ADA coordinator is available to assist students with disabilities who may need accommodations, specialized equipment, or referral services. Contact the Georgia Northwestern Technical College ADA Coordinator Sheila Parker at 706-295-6517 for all issues concerning the Floyd, Gordon, Polk, and Whitfield Murray Campuses. Contact the Georgia Northwestern Technical College ADA Coordinator, Michael Walters at 706-764-3799 for all issues concerning the Walker County Campus.

## **Veteran's Educational Services**

Georgia Northwestern Technical College assists armed services veterans and other students eligible for veteran's education benefits from the Veteran's Administration (VA). The Office of Financial Aid coordinates with other campus offices to provide assistance and counseling. The veteran should be prepared to sustain initial school costs since benefits will not begin for several weeks after enrollment. Students receiving VA benefits must adhere strictly to a planned program of study as indicated on his or her appropriate school and VA forms.

Program changes are to be reported promptly on appropriate VA forms through the office of financial aid. All dual majors must be pre-approved by the VA office; therefore, prior notification is imperative. All students receiving VA educational benefits are also required to report changes in course load, withdrawals, or interruptions in attendance to the Office of Financial Aid to minimize personal liability resulting from over-payment of VA benefits.

# **Military Training Credit**

Credit may be awarded for education/training experiences in the Armed Services. Such experiences must be certified by the American Council on Education (identified in the Council's publication, Guide to the Evaluation of Educational Experiences in the Armed Services or by the official catalog of the Community College of the Air Force or similar document.) Credit may be given when training experience meets required competencies of courses offered at the college.

# **Professional Certification Credit**

At GNTC instructors may recommend awarding credit for documented previous training to the vice president of academic affairs. The vice president of academic affairs reviews the request, and upon approval, forwards the request to the registrar. The registrar records the credit on the student's record as a grade of "EX".

# **Student Organizations and Activities**

Several activities are available to Georgia Northwestern Technical College students to enhance the college experience. Please refer to the Student Handbook for information about the organizations and activities.

# **Community Services**

# Southern Appalachian Educational Opportunity Outreach Center

The Southern Appalachian Educational Opportunity Outreach Center provides free career and educational guidance, assistance with college admission, and financial aid counseling. Help with GED<sup>®</sup>, vocational, or technical training is also available. Services are available for Georgia and Tennessee adults who reside in Walker, Catoosa, Dade, Hamilton, Bledsoe, Grundy, Sequatchie, and Marion counties. Please call for an appointment: 423-425-1702 or 706-639-2065.

## WIA Youth Success Academy

The Youth Success Academy is specifically designed for out of school youth who wish to attain a GED<sup>®</sup> and a technical education. The participants in the program will be involved in: GED<sup>®</sup> Preparation, Survival Skills for Youth Workshops, Customer Service Workshops, Career Exploration Activities, Community Service Projects, and Reader's Theater.

The WIA Youth Success Academy is sponsored through the Northwest Georgia RDC Workforce Investment Act. Those who are eligible may apply for travel and childcare stipends. Referrals may come through any number of sources, including self-referral. The Youth Success Academy is located at the Walker County Campus. The hours of operation are 8:30 am - 4:00 pm. For more information, contact Melissa Tweed, WIA Youth Services Academy Assistant, at 706-764-3728, or e-mail her at mtweed@gntc. edu.

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# **Adult Education**

# Adult Education and Literacy Services

Georgia Northwestern Technical College's Adult Education programs are designed specifically for adults with their unique educational and skills requirements. Our adult learning centers can prepare an individualized program of study or class instruction based on an assessment of skills levels in reading, social studies, science, writing skills, and mathematics. There are also classes for those who need to learn English as a Second Language (ESL). Preparation courses for the General Educational Development<sup>®</sup> (GED<sup>®</sup>) Tests for high school certification and the Work Keys Assessments for the Georgia Work Ready Certification are also available.

Adults of all ages, age 18 and older, can participate in day or evening programs which are tuition free. (Underage youth, age 16 and 17, who are officially withdrawn from school can participate only with special permission from their parents/guardian and from the Office of Adult Education.) All enrollees receive an educational evaluation and information on how to achieve their personal learning goals.

The learning centers have professional adult education instructors and the latest materials and educational technologies to help students move quickly into their future technical education, job training, or employment.

# **Adult Education Class Locations**

# Floyd County

Georgia Northwestern Technical College Adult Learning Center, Rome: (706)-295-6917

The Language and Literacy Center, Sara Hightower Library, Rome: (706)-236-4617 North Floyd Adult Learning Center at Glenwood School, Rome: (706) 236-1855

## Gordon County

Georgia Northwestern Technical College Adult Learning Center, Calhoun: (706) 624-1111

## **Polk County**

Adult and Family Learning Center, 602 South College Street, Cedartown: (770)- 748-2528 Georgia Northwestern Technical College Adult Learning Center, Rockmart: (770)-684-7521

## Catoosa County

Catoosa County Adult Learning Center: (706) 965-6155

## **Chattooga County**

Summerville Adult Learning Center, Summerville: (706) 857-0771 Trion First Baptist Church, Trion: (706) 859-2426

## Dade County

Dade County Adult Learning Center: (706) 657-2205 Davis Adult Learning Center: (423) 322-7848

## Walker County

Georgia Northwestern Technical College Adult Learning Center, Rock Spring: (706) 764-3679

LaFayette Housing Authority Adult Education Center, LaFayette: (706) 638-7703 Rossville Adult Learning Center, Rossville: (706) 858-0150

Call the nearest Adult Learning Center for information about class times and registration.

For further information about Adult Education services, call Georgia Northwestern Technical College in Floyd County at 706-295-6972 or in Walker County at 706-764-3564.

## **General Educational Development**<sup>©</sup> **Testing Centers**

Georgia Northwestern Technical College has two official GED® Testing Centers for administering the General Educational Development® Tests. GED® gives Georgia residents the opportunity to demonstrate attainment of academic achievement otherwise acquired through the completion of high school. A GED® diploma is issued by the state of Georgia through the Technical College System of Georgia to those adults who pass a series of five tests in the areas of writing, social studies, science, literature and the arts, and mathematics. Those who have not graduated from high school in the United States or Canada, or previously earned a GED® and are 18 years of age or older, are eligible to test. (Underage youth ages 16 and 17 must obtain special permission from the Technical College System of Georgia in order to take the test.) GED® candidates 19 years old and younger must provide a high school withdrawal document.

The GED Testing fee is currently \$95; however, a fee increase is anticipated during this program year However, test preparation services offered through the Adult Education program are free. Pre-registration is required, and a government issued photo ID is necessary for registration.

The testing centers, located in Floyd County and Walker County, regularly administer the tests at convenient locations in the seven county service area. For information, call the Floyd County office at 706-295-6975 or the Walker County office at 706-764-3581

#### Awards

Each year students in GNTC's Adult Education programs may participate in the local and statewide EAGLE Awards (Exceptional Adult Georgians in Literacy Education). Also, academic awards for high achievement are presented to GED<sup>®</sup> graduates each year at graduation ceremonies, along with a number of memorial scholarships and citizenship awards.

Georgia Northwestern Technical College Catalog

# **Library Services**

# **GNTC Library Services**

Georgia Northwestern Technical College libraries provide students, faculty, and staff with reference materials for in-house use, items for check-out, access to technology and electronic resources, and research instruction and/or assistance. Each campus of GNTC has a library facility and qualified librarians and staff to assist users. Adult community members may use the library and its resources, with preference given to students completing academic work.

Library holdings are in excess of 75,000 items. Library materials include books, audio-books, e-books, CD-ROMs, DVDs, videos, as well as newspapers and journals to support all GNTC programs of study. Library computers provide access to software applications, the Internet, the library online catalog, and a vast array of electronic resources via GALILEO (GeorgiA LIbrary LEarning Online), eBooks on EBSCOhost, and other privately licensed databases.

Library Services provides wireless internet access for students to use with their own laptop computers or with laptop computers available for checkout and use in the library. Other equipment available in the library includes desktop computers, TV's with built in VCR/DVD player, laminator, digital camera, digital video recorder, LCD projector, Accu-cut system, and photocopier.

Library staff present bibliographic instruction, orientations, and provide computer and reference assistance. Interlibrary loan services (borrowing library materials worldwide) are available to all faculty, staff, and students at no charge. GNTC faculty, staff, and students have reciprocal borrowing privileges with Berry, Shorter, Dalton, Covenant, and Georgia Highlands College libraries. All citizens of Georgia also have public library privileges at any PINES library.

Libraries on the Floyd and Walker County Campuses are open 7:30 a.m. – 9:00 p.m. Monday-Thursday and 7:30 a.m. – 4:00 p.m. Friday. The Gordon and Polk county campus libraries are open Monday-Thursday from 7:30 a.m. – 9:00 p.m. and 7:30 a.m. -1:00 p.m. Friday. Hours at the Whitfield-Murray county campus library are 8:00 a.m. – 7:00 p.m. Monday-Thursday and 8:00 a.m. – noon on Friday. Check with your campus library for hours between academic terms. For further information, visit the GNTC libraries or the GNTC library website at www.gntc.edu/library. Georgia Northwestern Technical College Catalog

# **Academic Affairs**

### **Academic Affairs at GNTC**

Academic programs are grouped into instructional divisions—Business Technologies, General Education and Learning Support, Health Technologies, Industrial Technologies, Nursing and Allied Health Technologies, and Public Service Technologies. Within instructional divisions, programs are identified as associate degree nursing, associate of applied science degree, diploma, or technical certificates of credit (TCC). Each program is a major area of concentration consisting of general core courses and/or occupationally related courses.

Program completion time will vary based on program choices and previous training. In addition, while all courses offered each semester are expected to be taught, a course that fails to have a sufficient number of enrollees may be dropped. When available, program courses may be completed at any GNTC campus (Floyd, Gordon, Polk, Walker, Whitfield Murray), as well as online through GNTC or through GVTC (Georgia Virtual Technical Connection).

Courses are offered in various formats: lecture, lecture/lab, clinical/internship-based, web-enhanced, hybrid, and on-line. Some, but not all, courses are offered in the evening hours. Students should be prepared to take courses in all formats during their program of study.

Some courses have identified prerequisites or co-requisites. These are located in the course descriptions section of this catalog. Students must score a "C" or better in pre-requisite courses in order to advance to the next course level.

An increasing number of GNTC general core and occupational classes are available for online completion through GVTC. Online learning removes barriers of time and location that can prevent students from pursuing educational opportunities. To assist GNTC's online students in their success, GNTC recommends that all students taking an online option perform the *SmarterMeasure* assessment and view the available online DEMO on GNTC's home page and select the link "Angel."

### **Degree Opportunities**

In support of students who wish to pursue associate degrees, GNTC offers the associate of science in nursing (ASN), and associate of applied science (AAS) degrees. GNTC also has articulation agreements with other colleges for selected bachelor degrees.

Under an agreement with the Board of Regents (BOR) of the University System of Georgia, the following GNTC courses will transfer to a BOR college: ENG 1101, ENG 1102, ENG 2130, ECO 1101, PSY 1101, SOC 1101, SPC 1101, MAT 1101, MAT 1111, and MAT 1113

Students wishing to have other courses transferred to a BOR college, or are planning to transfer to a non-BOR college, must contact the receiving college to determine if the courses will be accepted for transfer.

# **General Education Division**

Each degree and diploma program of study at Georgia Northwestern Technical College (GNTC) consists of general education core courses and occupational curriculum. In addition to providing job skills necessary to perform occupational tasks, the general education courses will make up a substantial component of each associate degree and diploma.

### Associate Degree General Education Requirements

The purpose of the general education core at GNTC is to provide students with a common, broad-based, well-rounded, collegiate level educational experience that ensures breadth of knowledge and adheres to a coherent rationale. The college requirement for general core curriculum for an associate degree is a minimum of 15 semester hours using the curriculum structure in the table on the following page. This structure follows the approved state standardized structure while adhering to the GNTC purpose of the general education core. The general education core consists of four areas that include the following: Area I- Language Arts/Communication, Area II- Social/Behavioral Sciences, Area III- Natural Sciences/ Mathematics, and Area IV- Humanities/Fine Arts.

### **Diploma Basic Skills Requirements**

The college requirement for diploma basic skills courses is a minimum of 8 semester hours using the curriculum in the third table that follows. Each diploma category has specific distribution requirements.

Area I	Language Arts/Communication	Minimum 3 semester hours			
	Successful completion of ENGL 1101 is required.				
	Courses may be taken from the following academic fields:				
	English Composit				
	Communication/S	·			
	Foreign Language				
Area II	Social/Behavioral Sciences	Minimum 3 semester hours			
	Successful completion of a Social Science	s/Behavioral Sciences course is required.			
	Courses may be taken from	he following academic fields:			
	Economics	Political Science			
	Ethnology/Ethnic Studies	Psychology			
	History	Sociology			
Successful completion of MATH 1100 or MATH 1101 or MATH 1111 Courses may be taken from the following academic fields:		Minimum 3 semester hours			
		Geography			
	Biology	Mathematics			
	Chemistry	Physics			
	Computer Science				
Area IV	Humanities/Fine Arts	Minimum 3 semester hours			
	Successful completion of a Humar	ities/Fine Arts course is required.			
	Courses may be taken from t	he following Academic Fields:			
	Art Appreciation	Music Appreciation			
	American Literature	Philosophy			
	English Literature	Theatre Appreciation			
	Film Studies and Criticism	Humanities			
	Literature and Cultural Studies				
**To meet	the minimum required 15 semester hours selected from Areas I, 1				
		1, 111, 01 1V.			

The following tables list degree general education core courses, diploma basic skills courses, and learning support courses that are offered by Technical College System of Georgia (TCSG) colleges in either in-class or online settings. All courses may not be offered at the college. Most courses are available online through Georgia Virtual Technical Connections (GVTC). GVTC is the central point of reference for all online courses and programs offered through TCSG. For more information visit GVTC's website at www.gvtc.org.

Degree Seeking Students			
General Education / Area I - Language Arts/Communication			ore Courses
ENGL 1101	Composition and Rhetoric	ECON 1101	Principles of Economics
ENGL 1102	Literature and Composition	ECON 2105	Principles of Macroeconomics
SPCH 1101	Public Speaking	ECON 2106	Principles of Microeconomics
		HIST 1111	World History I
		HIST 1112	World History II
		HIST 2111	U.S. History I
		HIST 2112	U.S. History II
		POLS 1101	American Government
		PSYC 1101	Introductory Psychology
		SOCI 1101	Introduction to Sociology
	•		
Area III -	Natural Sciences/Mathematics	Area IV - H	umanities/Fine Arts
BIOL 1111	Biology I	ARTS 1101	Art Appreciation
BIOL 1112	Biology II	ENGL 2130	American Literature
CHEM 1211	Chemistry I	HUMN 1101	Introduction to Humanities
CHEM 1212	Chemistry II	MUSC 1101	Music Appreciation
CHEM 1151	Survey of Inorganic Chemistry		
CHEM 1152	Survey of Organic Chemistry and Biochemistry		
MATH 1100	Quantitative Skills and Reasoning		
MATH 1101	Mathematical Modeling		
MATH 1111	College Algebra		
MATH 1112	College Trigonometry		
MATH 1113	Precalculus		
MATH 1127	Introduction to Statistics		
MATH 1131	Calculus I		
MATH 1132	Calculus II		
PHSC 1111	Physical Science		
PHYS 1110	Conceptual Physics		
PHYS 1111	Introductory Physics I		
PHYS 1112	Introductory Physics II		

Students who have a special interest in, or a need for, a different general core course than the one that is suggested in the specific core curriculum should discuss other possibilities with their advisor or with general education faculty.

Diploma Basic Skills Courses					
EMPL 1000	Interpersonal Relations and Professional Development	MATH 1013	Algebraic Concepts		
ENGL 1010	Fundamentals of English I	MATH 1015	Geometry & Trigonometry		
ENGL 1012	Fundamentals of English II	MATH 1017	Trigonometry		
MATH 1011	Business Mathematics	PSYC 1010	Basic Psychology		
MATH 1012	Foundations of Mathematics				
	Learning Sup	port Courses	3		
ENGL 0096	English I	MATH 0098	Elementary Algebra		
ENGL 0097	English II	MATH 0099	Intermediate Algebra		
ENGL 0098	English III	READ 0096	Reading I		
MATH 0096	Math I	READ 0097	Reading II		
MATH 0097	Math II	READ 0098	Reading III		

# **Learning Support Studies**

Because GNTC is dedicated to helping its students succeed, it places importance on testing, placement, and remediation of students. Learning support courses in English, reading, and mathematics are required for students whose placement scores indicate that they need remediation in one or more academic areas. Students lacking the minimum required SAT or ACT scores will be given a placement test at the time of application. This test is used for counseling and placement purposes only. If the test scores fall below the requirements for Regular (Program Ready) Status, the student will be granted either Learning Support Status or Provisional Status.

Students whose test scores place them in any 0096 course are assigned Learning Support Status. Students whose test scores place them in a course at the 0097, 0098, or 0099 level with no courses below 0097 are granted Provisional Status. Students placed in English 0096, 0097; Reading 0096 or 0097; or Math 0096, or 0097 will be required to take College Success, COLL 1001.

Students with Learning Support Status may not take any courses in their programs of study until all courses at 0096 level are completed. Students are not eligible to graduate if Learning Support courses, including College Success, have not been completed. Students with Learning Support status may not be eligible for certain kinds of financial aid.

# **Business Technologies**

The Business Technologies Division consists of associate of applied science degree, diploma, and certificate programs. The purpose of these programs is to provide educational opportunities that will enable students to obtain the knowledge, skills, and attitudes to succeed in the respective fields. All programs are not offered on every Georgia Northwestern Technical College (GNTC) campus. As with all GNTC programs, students interested in Business Technology programs should consult specific program information in this catalog and visit or call the Student Success Center to discuss program admission requirements and entry dates. The following is a list of the Business Technology degrees, diplomas, and certificates that GNTC offers. Letters following the program names identify the campuses where the programs are taught. (F-Floyd County Campus, G-Gordon County Campus, P-Polk County Campus, W-Walker County Campus, WM-Whitfield Murray Campus). GNTC reserves the right to cancel courses due to inadequate enrollment.

# Associate of Applied Science Degree Programs

Accounting (AC13) - F, G, W Business Administrative Technology (BA23) - W Business Management (MD13) - G, W, WM Computer Support Specialist (CS23) - F, G, P, W, WM Health Information Technology (HI13) - W Internet Specialist-Web Site Design (IS53) - W Marketing Management (MM13) - F Networking Specialist (NS13) - F, G, P, W

# Diploma Programs

Accounting (AC12) - F, G, W Business Administrative Technology (BA22) - F, G, P, W Business Management (MD12) - G, W, WM Computer Support Specialist (CS14) - F, G, P, W, WM Health Information Coding (HI12) - W Internet Specialist-Web Site Design (IS64) - W Marketing Management (MM12) - F Networking Specialist (NS14) - F, G, P, W

# **Certificate Programs**

Administrative Support Assistant (AS21) - F, G, P, W Certified Customer Service Specialist (CC81) - F CISCO Network Specialist (CN71) - F, W CompTIA A+ Certified Technician Preparation (CA71) - F, G, P, W, WM Computer Forensic and Investigation Specialist (CF31) - W (Not Accepting New Students Into This Program) Computer Forensics & Security Specialist (CF51) - F, G, P, W Computerized Accounting Specialist (CAY1) - F, G, W Data Entry Clerk (DEC1) - F, G, P Data Management (DM11) - W (Not Accepting New Students Into This Program) Entrepreneurship (EN11) - F, G Help Desk Specialist (HD41) - F, G, P, W Human Resource Management Specialist (HRM1) - G, WM Internet Specialist Web Site Developer (ISE1) - P, W Linux/UNIX System Administrator (LA31) - F, G, P, W Marketing Specialist (MS21) - F

Medical Coding (MC41) - F Medical Front Office Assistant (MF21) - F, P, W Medical Language Specialist (MLS1) - F, G, P, W Microsoft Excel Application Specialist (ME21) - F, G, P, W Microsoft Network Administrator (MS11) - F, G, W Microsoft Office Application Professional (MF41) - F, G, P, W Microsoft Office Application Specialist (MF51) - F, G, P, W Microsoft Word Application Specialist (MW11) - F, G, P, W Office Accounting Specialist (OA31) - F, G, W Operations Management Specialist (OM11) -G, WM Payroll Accounting Specialist (PA61) - F, G, W PC Repair and Network Technician (PR21) - F, G, P, W, WM Supervisor/Manager Specialist (SS31) - W Tax Preparation Specialist (TPS1) - F, G Technical Management Specialist (TMS1) - G Technical Specialist (TC31) - F, G, P, W, WM

Program lengths vary based on program type and number of hours taken each semester.

### ACCOUNTING (AC13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

### **Program Description:**

The Accounting Associate Degree program is a sequence of courses that prepares students for a variety of careers in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Associate of Applied Science Degree in Accounting.

General Education Core (15 Credit Hours)*		Credit Hours	
ENGL 1101	Composition and Rhetoric	3	
XXXX xxxx	Humanities/Fine Arts Elective	3	
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3	
MATH 1100	Quantitative Skills and Reasoning	3	
or			
MATH 1101	Mathematical Modeling	(3)	
or			
MATH 1111	College Algebra	(3)	
XXXX xxxx	General Education Core Elective	3	
Occupation	al Curriculum (49 Credit Hours)	<b>Credit Hours</b>	
ACCT 1100	Financial Accounting I	4	
BUSN 1440	Document Production	4	
COMP 1000	Introduction to Computers	3	
ACCT 1105	Financial Accounting II	4	
ACCT 1110	Managerial Accounting	3 3	
ACCT 1115	Computerized Accounting	3	
ACCT 1120	Spreadsheet Applications	4	
ACCT 1125	Individual Tax Accounting		
ACCT 1130	Payroll Accounting	3 3	
ACCT xxxx	Accounting Electives	9	
XXXX xxxx	Specific Occupational-Guided Electives	6	
XXXX xxxx	Elective	3	

### **Total Credit Hours: 64 Minimum Credit Hours Required for Graduation**

\* To view General Education Core Courses refer to page 79

### BUSINESS ADMINISTRATIVE TECHNOLOGY (BA23) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Walker County Campus

### Program Description:

The Business Administrative Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Administrative Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, and presentation applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and terminology that encompasses office management and executive assistant qualification and technology innovations for the office. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of administrative technology. Graduates of the program receive a Business Administrative Technology, Associate of Applied Science degree.

General Edu	cation Core (15 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3 3 3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3
Occupation	al Curriculum (49 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
BUSN 1400	Word Processing Applications	4
BUSN 1430	Desktop Publishing and Presentation Applications	4
BUSN 1440	Document Production	4
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1420	Database Applications	4
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
BUSN 2190	Business Document Proofreading & Editing	3 3 3
MGMT 1100	Principles of Management	
ACCT 1100	Financial Accounting	4
Or		
BUSN 2200	Office Accounting	(4)
XXX xxxx	Specific Occupational Guided Electives	6

### Total Credit Hours: 64 Minimum Credit Hours Required for Graduation

\* To view General Education Core Courses refer to page 79

### **BUSINESS MANAGEMENT (MD13) ASSOCIATE OF APPLIED SCIENCE DEGREE**

### **Campus Availability:**

- Gordon County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Business Management program is designed to prepare students for entry into management and supervisory occupations in a variety of businesses and industries. Learning opportunities will introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement in management. Graduates of the program receive a Business Management degree with a specialization in General Management, Service Sector Management, Operations Management, or Human Resource Management.

General Edu	cation Core (18 Credit Hours)*	<b>Credit Hours</b>	
ENGL 1101	Composition and Rhetoric	3	
XXXX xxxx	Humanities/Fine Arts Elective	3 3 3	
XXXX xxxx	Social/Behavioral Sciences Elective	3	
MATH 1100	Quantitative Skills and Reasoning	3	
or	NA 11		
MATH 1101	Mathematical Modeling	(3)	
or MATH 1111	College Algebra	(3)	
XXXX xxxx	General Education Core Electives	6	
Occupationa	al Curriculum (33 Credit Hours)	Credit Hours	
MGMT 1135	Managerial Accounting and Finance	3	
or	5		
ACCT 1100	Financial Accounting I	(4)	
COMP 1000	Introduction to Computers		
MGMT 1100	Principles of Management	3 3 3	
MGMT 1110	Employment Law	3	
or			
MKTG 1130	Business Regulations and Compliance	(3)	
MGMT 1105	Organizational Behavior	3 3 3 3 3 3 3 3	
MGMT 1120	Introduction to Business	3	
MGMT 1115	Leadership	3	
MGMT 1125		3	
MGMT 2115	5	3	
MGMT 2125	5	3	
MGMT 2215	Team Project	3	
Choose One	Specialization (12 Credit Hours)	Credit Hours	
General Management Specialization			
	MGMT Elective	3	
	MGMT Elective	3 3 3 3	
MGMT xxxx		3	
XXXX xxxx	Guided Elective	3	
	ements continued on following page)		

or

### Human Resource Management Specialization

MGMT 2120	Labor Management Relations	
MGMT 2130	Employee Training & Development	
MGMT 2205	Service Sector Management	
or		
MGMT 2210	Project Management	(3
XXXX xxxx	Guided Elective	

or

### **Operations Management Specialization**

MGMT 2130	Employee Training & Development	3
MGMT 2200	Production/Operations Management	3
MGMT 2210	Project Management	3
XXXX xxxx	Guided Elective	3

or

### Service Sector Management Specialization

MGMT 2130	Employee Training & Development	3
MGMT 2140	Retail Management	3
MGMT 2205	Service Sector Management	3
XXXX xxxx	Guided Elective	3

### **Total Credit Hours: 63 Minimum Credit Hours for Graduation**

\* To view General Education Core Courses refer to page 79

### COMPUTER SUPPORT SPECIALIST (CS23) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialists.

General Education Core (15 Credit Hours)*		<b>Credit Hours</b>
ENGL 1101 XXXX xxxx XXXX xxxx MATH 1100 or	Composition and Rhetoric Humanities/Fine Arts Elective Social/Behavioral Sciences Elective Quantitative Skills and Reasoning	3 3 3 3
MATH 1101 or	Mathematical Modeling	(3)
MATH 1111 XXXX xxxx	College Algebra General Education Core Elective	(3) 3
Occupation	al Curriculum (47 Credit Hours)	<b>Credit Hours</b>
COMP 1000 CIST 1001 CIST xxxx CIST 1305 CIST 1401 or	Introduction to Computers Computer Concepts Computer Operating System Course Program Design and Development Computer Networking Fundamentals	3 4 3 3 4
CIST 2441 or	CISCO Networking for Home and Small Businesses	(4)
CIST 2451 CIST 1122 CIST 1601 CIST 2921 CIST xxxx CIST xxxx CIST xxxx	CISCO Network Fundamentals Hardware Installation and Maintenance Information Security Fundamentals IT Analysis, Design, and Project Management CIS Electives CIS Database Elective CIS Guided Office Productivity Application Course	(4) 4 3 4 12 4 3

### **Total Credit Hours: 62 Minimum Credit Hours for Graduation**

#### \* To view General Education Core Courses refer to page 79

### HEALTH INFORMATION TECHNOLOGY (HI13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

### • Walker County Campus

**Program Description:** The Health Information Technology program is a sequence of courses designed to provide students with the technical knowledge and skills necessary to process, maintain, analyze, and report health information data according to legal, accreditation, licensure and certification standards for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment and research. Program graduates will develop leadership skills necessary to serve in a functional supervisory role in various components of the health information system.

The Health Information Technology program at Georgia Northwestern Technical College is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon graduation from a CAHIIM accredited HIT program, students will be eligible to sit for the national certification examination. Upon successful completion of the exam, students will receive the RHIT credential through the American Health Information Management Association (AHIMA).

General Edu	cation Core (15 Credit Hours)*	<b>Credit Hours</b>	
ENGL 1101	Composition and Rhetoric	3	
XXXX xxxx	Humanities/Fine Arts Elective	3	
XXXX xxxx	Social/Behavioral Sciences Elective	3 3	
MATH 1100	Quantitative Skills and Reasoning	3	
or			
MATH 1101	Mathematical Modeling	(3)	
or			
MATH 1111	College Algebra	(3)	
XXXX xxxx	Program Specific General Education Elective	3	
		t Hours	
HIMT 1100	Introduction to Health Information Technology	3	
HIMT 1350	Pharmacotherapy	2 3 3	
COMP 1000	Introduction to Computers	3	
BIOL 2113	Anatomy and Physiology I	3	
BIOL 2113L	Anatomy and Physiology Lab I	1	
BIOL 2114	Anatomy and Physiology II	3	
BIOL 2114L	Anatomy and Physiology Lab II	1	
HIMT 1250	Health Record Content and Structure	2	
ALHS 1090	Medical Terminology for the Allied Health Sciences	2	
or			
BUSN 2300	Medical Terminology	(2)	
HIMT 1150	Computer Applications in Healthcare	2	
HIMT 2200	Performance Improvement	2	
HIMT 1200	Legal Aspects in Healthcare	2 3	
MAST 1120	Human Pathological Conditions in the Medical Office		
HIMT 1400	Coding and Classification I: ICD Coding	4	
HIMT 2300	Healthcare Management	3	
HIMT 2150	Healthcare Statistics	2	
HIMT 1410	Coding and Classification II: ICD Advanced Coding	3	
HIMT 2400	Coding and Classification Systems III: CPT/HCPCS Codin	3 2 3 9 3 2 3	
HIMT 2410	Revenue Cycle Management	2	
HIMT 2460	Health Information Technology Practicum	3	
Total Credit I	Hours: 64 Minimum Credit Hours for Graduation		
To view General Education Core Courses refer to page 79			

To view General Education Core Courses refer to page 79

### INTERNET SPECIALIST-WEB SITE DESIGN (IS53) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Walker County Campus

### **Program Description:**

The Computer Information Systems – Internet Specialist-Web Site Design program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Internet Specialist Web Site Designers.

General Education Core (15 Credit Hours)*		Credit Hours
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3

Occupation	al Curriculum (49 Credit Hours)	Credit Hours
CIST 1001	Computer Concepts	4
COMP 1000	Introduction to Computers	3
CIST 1305	Program Design and Development	3
CIST 1220	Structured Query Language	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 2510	Web Technologies	3
CIST 2541	Web Animation II	3
or		
CIST 2531	Web Graphics II	(3)
CIST 2550	Web Development II	3
CIST 2921	IT Analysis, Design, and Project Management	4

(Program requirements continued on following page)

# INTERNET SPECIALIST-WEB SITE DESIGN (CONT.)

(Choose one	e - 4 credits)	
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	(4)
CIST 2381	Mobile Application Development	(4)
CIST 2371	Java Programming I	(4)
CIST 2311	Visual Basic I	(4)
CIST 2351	PHP Programming I	(4)
CIST 2341	C# Programming I	(4)
CIST 2580	Interactive and Social Apps Integration	(4)
(Choose one	e - 3 credits)	
CIST 2950	Web Systems Project	3
or		
CIST 2991	CIST Internship I	(3)

### **Total Credit Hours: 64 Minimum Credit Hours for Graduation**

\* To view General Education Core Courses refer to page 79

### MARKETING MANAGEMENT (MM13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

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 that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing management. Graduates of the program receive a Marketing Management associates degree.

General Edu	cation Core (15 Credit Hours) *	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3
MATH 1100	Quantitative Skills and Reasoning	3
or		$(\mathbf{a})$
MATH 1101 or	Mathematical Modeling	(3)
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective from Area I, II, or III	3
Occupationa	al Curriculum (36 Credit Hours)	Credit Hours
COMP 1000	Introduction to Computers	3
ACCT 1100	Financial Accounting I	4
BUSN 1190	Digital Technologies in Business	
MKTG 1100	Principles of Marketing	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 2090	Marketing Research	3
MKTG 1160	Professional Selling	2 3 3 3 3 3 3 3 3 3 3 3
MKTG 1130	Business Regulations and Compliance	3
MGMT 1100	Principles of Management	3
MKTG 2300	Marketing Management	3
MKTG 2000 or	International Marketing	3
MKTG 2290	Marketing Internship/Practicum	(3)
XXXX xxxx	Elective	3
Choose One	Specialization (11-12 Credit Hours)	Credit Hours
Marketing M	lanagement Specialization	
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3 3 3
MKTG 1210	Services Marketing	3
or		
MKTG 2070	Buying and Merchandising	(3)
MKTG xxxx	Marketing Elective	3
or		

(Program requirements continued on following page)

### **Entrepreneurship Specialization**

	<u> </u>
MKTG 2210	Entrepreneurship
MKTG 2010	Small Business Manager
MKTG 2070	Buying and Merchandi
or	
MKTG 1210	Services Marketing

# or

# e-Business Specialization

MKTG 2210	Entrepreneurship	6
BUSN 2170	Web Page Design	2
MKTG 2070	Buying and Merchandising	3
or		
MKTG 1210	Services Marketing	(3)

or

# **Retail Management Specialization**

MKTG 1270	Visual Merchandising	3	3
MKTG 1370	Consumer Behavior	3	3
MKTG 2070	Buying and Merchandisi	ng 3	3
MKTG 2270	Retail Operations Manag	jement 3	3

or

# **Professional Selling Specialization**

MKTG 2060	Marketing Channels	3
MKTG 1370	Consumer Behavior	3
MKTG 1210	Services Marketing	3
MKTG 2160	Advanced Selling	3

### **Total Credit Hours: 62 Minimum Credit Hours for Graduation**

### \* To view General Education Core Courses refer to page 79

### NETWORKING SPECIALIST (NS13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Computer Information Systems - Networking Specialist associate degree program is a sequence of courses designed to provide students with an understanding of the concepts and 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 a Networking Specialist associate of applied science degree and are qualified for employment as networking specialists.

General Edu	cation Core (15 Credit Hours)*	Credit Hours
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3 3 3 3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or MATH 1101	Mathematical Modeling	(3)
or		(0)
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3
Occupationa	al Curriculum (35 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
CIST 1001	Computer Concepts	4
CIST xxxx	CIS Electives	14
CIST xxxx	Computer Operating System Course	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1401	Computer Networking Fundamentals	4
or CIST 2441	CISCO Networking for Home and Small Businesses	s (4)
or	CISCO Networking for home and Small Businesses	5 (+)
CIST 2451	CISCO Network Fundamentals	(4)
CIST xxxx	CIS Security Course	3
Choose One	Specialization (16 Credit Hours)	<b>Credit Hours</b>
CISCO Explo	pration Specialization	
CIST 2451	CISCO Networking Fundamentals	4
or		
CIST xxxx	CIS Networking Elective	(4)
CIST 2452	CISCO Routing Protocols and Concepts	4
CIST 2453	CISCO LAN Switching and Wireless	4
CIST 2454	CISCO Accessing the WAN	4
or		

(Program requirements continued on following page)

# **NETWORKING SPECIALIST (CONT.)**

# Linux/UNIX Specialization

CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4

or

### **Microsoft Specialization**

Scelanzacion	
Microsoft Client	4
Microsoft Server Directory Services	4
Microsoft Server Infrastructure	4
Microsoft Elective	4
	Microsoft Client Microsoft Server Directory Services Microsoft Server Infrastructure

### **Total Credit Hours: 66 Minimum Credit Hours for Graduation**

\* To view General Education Core Courses refer to page 79

### ACCOUNTING (AC12) DIPLOMA

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

### **Program Description:**

The Accounting Diploma program is a sequence of courses that prepares students for a variety of entry-level positions in accounting in today's technology-driven workplaces. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive an Accounting diploma.

<b>Basic Skills</b>	Courses (8-9 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000 or	Interpersonal Relations and Professional Development	2
PSYC 1010	Basic Psychology	(3)
MATH 1011	Business Math	3
	Foundations of Mathematics	( <b>2</b> )
MATH 1012	Foundations of Mathematics	(3)
Occupation	al Curriculum (34 Credit Hours)	<b>Credit Hours</b>
ACCT 1100	Financial Accounting I	4
BUSN 1440	Document Production	4
COMP 1000	Introduction to Computers	3
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1120	Spreadsheet Applications	4
ACCT 1125	Individual Tax Accounting	3
ACCT 1130	Payroll Accounting	3
ACCT XXXX	Accounting Elective	3
XXXX xxxx	Specific Occupational Guided Elective	3

**Total Credit Hours: 42 Minimum Credit Hours for Graduation** 

# BUSINESS ADMINISTRATIVE TECHNOLOGY (BA22) DIPLOMA

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Business Administrative Technology program is designed to prepare graduates for employment in a variety of positions in today's technology-driven workplaces. The Business Administrative Technology program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes the use of word processing, spreadsheet, presentation, and database applications software. Students are also introduced to accounting fundamentals, electronic communications, internet research, and electronic file management. The program includes instruction in effective communication skills and technology that encompasses office management and executive assistant qualification and technology innovations for the office. Also provided are opportunities to upgrade present knowledge and skills or to retrain in the area of business administrative technology. Graduates of the program receive a Business Administrative Technology Diploma with a specialization in one of the following: Business Administrative Assistant or Medical Administrative Assistant.

<b>Basic Skills</b>	Courses (8-9 Credit Hours)	Credit Hours
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)
MATH 1011	Business Math	3
or		
MATH 1012	Foundations of Mathematics	(3)
_		
<b>Occupation</b>	al Curriculum (18 Credit Hours)	Credit Hours
Occupation COMP 1000	<b>al Curriculum (18 Credit Hours)</b> Introduction to Computers	Credit Hours 3
COMP 1000	Introduction to Computers	3
COMP 1000 BUSN 1400	Introduction to Computers Word Processing Applications	3 4
COMP 1000 BUSN 1400 BUSN 1440	Introduction to Computers Word Processing Applications Document Production	3 4 4
COMP 1000 BUSN 1400 BUSN 1440 BUSN 2190	Introduction to Computers Word Processing Applications Document Production Business Document Proofreading & Editing	3 4 4 3
COMP 1000 BUSN 1400 BUSN 1440 BUSN 2190 ACCT 1100	Introduction to Computers Word Processing Applications Document Production Business Document Proofreading & Editing	3 4 4 3

### And completion of one of the following specializations:

<b>Business Ac</b>	Iministrative Assistant Specialization (24 Hours)	<b>Credit Hours</b>
BUSN 1190	Digital Technologies in Business	2
BUSN 1240	Office Procedures	3
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1430	Desktop Publishing and Presentation Applications	4

(Program requirements continued on following page)

# **BUSINESS ADMINISTRATIVE TECHNOLOGY (CONT.)**

		Credit Hours
BUSN 2160	Electronic Mail Applications	2
BUSN 2210	Applied Office Procedures	3
XXXX xxxx	Advisor Approved Electives	6

### or

Medical Adr	ninistrative Assistant Specialization (24 Hours)	<b>Credit Hours</b>
BUSN 2310	Anatomy and Terminology for the Medical Administrativ	ve Asst. 3
or		
ALHS 1010	Introduction to Anatomy and Physiology	(4)
or		
ALHS 1011	Anatomy and Physiology	(5)
ALHS 1090	Medical Terminology for the Allied Health Sciences	2
or		
BUSN 2300	Medical Terminology	(2)
MAST 1120	Human Pathological Conditions in the Medical Office	3
BUSN 2340	Medical Administrative Procedures	4
BUSN 2370	Medical Office Billing/Coding/Insurance	3
XXXX xxxx	Advisor Approved Electives	9
Total Credit	Hours: 50 Minimum Credit Hours for Graduation	

#### GNTC \_\_\_\_\_

### BUSINESS MANAGEMENT (MD12) DIPLOMA

# **Campus Availability:**

- Gordon County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Business Management program is designed to prepare students for entry into management positions in a variety of businesses and industries. Learning opportunities will introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement in management. Graduates of the program receive a Business Management diploma.

Basic Skills	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)
MATH 1011	Business Math	3
Occupation	al Curriculum (39 Credit Hours)	<b>Credit Hours</b>
MGMT 1135	Managerial Accounting and Finance	3
or		
ACCT 1100		(4)
COMP 1000	I I I I I I I I I I I I I I I I I I I	3
MGMT 1100	Principles of Management	3 3 3
MGMT 1110	Employment Law	3
or		(-)
MKTG 1130	Business Regulations and Compliance	(3)
MGMT 1105	Organizational Behavior	3
MGMT 1120	Introduction to Business	3
MGMT 1115	Leadership	3
MGMT 1125	Business Ethics	3
MGMT 2115	Human Resource Management	3
MGMT 2125	Performance Management	3 3 3 3 3 3 3 3 3
MGMT 2215 XXXX xxxx	Team Project Guided Electives	6
~~~~ XXXX	Guided Liecuves	O

**Total Credit Hours: 47 Minimum Credit Hours for Graduation** 

### COMPUTER SUPPORT SPECIALIST (CS14) DIPLOMA

# **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Computer Information Systems – Computer Support Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as computer support specialists.

Basic Skills	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (47 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
CIST 1001	Computer Concepts	4
CIST xxxx	Computer Operating System Course	3
CIST 1305	Program Design and Development	3
CIST 1401	Computer Networking Fundamentals	4
or		
CIST 2441	CISCO Networking for Home and Small Businesses	(4)
or		
CIST 2451	CISCO Network Fundamentals	(4)
CIST 1122	Hardware Installation and Maintenance	4
CIST 1601	Information Security Fundamentals	3
CIST 2921	IT Analysis, Design, and Project Management	4
CIST xxxx	CIS Electives	12
CIST xxxx	CIS Database Elective	4
CIST xxxx	CIS Guided Office Productivity Course	3

### **Total Credit Hours: 55 Minimum Credit Hours for Graduation**

### HEALTH INFORMATION CODING (HI12) DIPLOMA

### **Campus Availability:**

### Walker County Campus

**Program Description:** The Health Information Coding Associate prepares students to be medical coders and billers to classify medical records according to accepted standards. The classification of diagnoses and treatments is required for Medicare and insurance reimbursement in hospitals, outpatient clinics and medical offices. The program offers training in anatomy and physiology, medical terminology, diagnostic coding, and medical procedural coding.

**Note:** HIT Students must maintain a GPA of 2.0 on a scale of 4.0 and must attain a minimum of a "C" (2.0) or better in biology and occupational courses in the HIT curriculum. A student may not progress to the next course in the sequence without having made a "C" in the previous or prerequisite course.

<b>Basic Skills</b>	Courses (8 Credit Hours)	Credit Hours
ENGL 1010	Fundamentals of English	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)
MATH 1013	Algebraic Concepts	3
Occupation	al Curriculum (40 Credit Hours)	<b>Credit Hours</b>
ALHS 1090	Medical Terminology for the Allied Health Sciences	2
or		
BUSN 2300	Medical Terminology	(2)
ALHS 1011	Anatomy and Physiology	5 3 3 2
HIMT 1100	Introduction to Health Information Technology	3
MAST 1120	Human Pathological Conditions in the Medical Office	3
HIMT 1350	Pharmacotherapy	
HIMT 1250	Health Record Content and Structure	2
HIMT 1400	Coding and Classification I: ICD Coding	4
COMP 1000	Introduction to Computers	3
HIMT 1410	Coding and Classification II: ICD Advanced Coding	3 3 2
HIMT 1200	Legal Aspects in Healthcare	2
HIMT 2410	Revenue Cycle Management	2
HIMT 2400	Coding and Classification Systems III: CPT/HCPCS Codin	g 3 2
HIMT 1150	Computer Applications in Healthcare	
HIMT 2500	Certification Seminar	4

Total Credit Hours: 48 Minimum Credit Hours for Graduation

# INTERNET SPECIALIST-WEB SITE DESIGN (IS64) DIPLOMA

### **Campus Availability:**

Walker County Campus

### **Program Description:**

The Computer Information Systems – Internet Specialist Web Site Design program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as Internet Specialist Web Site Designers.

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2 3
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (46 Credit Hours)	<b>Credit Hours</b>
CIST 1001	Computer Concepts	4
COMP 1000	Introduction to Computers	3
CIST 1305	Program Design and Development	3
CIST 1220	Structured Query Language	4
CIST 1510	Web Development I	3 4 3 3 3 3 3 3 3 3 3 3 3
CIST 1520	Scripting Technologies	3
CIST 1530	Web Graphics I	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 2510	Web Technologies	3
CIST 2531	Web Graphics II	3
or		
CIST 2541	Web Animation II	(3)
CIST 2550	Web Development II	3
CIST 2921	IT Analysis, Design, and Project Management	4
	e - 4 credits)	
CIST 2560	Web Application Programming I	4
CIST 2570	Open Source Web Application Programming I	(4)
CIST 2381	Mobile Application Development	(4)
CIST 2371	Java Programming I	(4)
CIST 2311	Visual Basic I	(4)
CIST 2351	PHP Programming I	(4)
CIST 2341	C# Programming I	(4)
CIST 2580	Interactive and Social Apps Integration	(4)
Total Credit I	Hours: 54 Minimum Credit Hours for Graduation	

### MARKETING MANAGEMENT (MM12) DIPLOMA

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

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 that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of marketing management. Graduates of the program receive a Marketing Management diploma.

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English	3
EMPL 1000	Interpersonal Relations and Professional Development	2
Or		(2)
PSYC 1010 MATH 1011	Basic Psychology Business Math	(3) 3
		2
	al Curriculum (36 Credit Hours)	2
COMP 1000	Introduction to Computers	3
ACCT 1100	Financial Accounting I	4
BUSN 1190	Digital Technologies in Business	2
MKTG 1100 MKTG 1190	Principles of Marketing	3
MKTG 2090	Integrated Marketing Communications Marketing Research	2
MKTG 1160	Professional Selling	2
MKTG 1130	Business Regulations and Compliance	3
MKTG 2300	Marketing Management	3
BUSN 1300	Introduction to Business	2 3 3 3 3 3 3 3 3 3
or		•
MGMT 1100	Principles of Management	(3)
MKTG 2000	International Marketing	3
or		
MKTG 2290	Marketing Internship/Practicum	(3)
XXXX xxxx	Guided Elective	3
Choose One	Specialization (11-12 Credit Hours)	Credit Hours
Marketing N	lanagement Specialization	
MKTG 1370	Consumer Behavior	3
MKTG 2060	Marketing Channels	3 3 3
MKTG 1210	Services Marketing	3
or		
MKTG 2070	Buying and Merchandising	(3)
MKTG xxxx	Marketing Elective	3

### or

(Program requirements continued on following page)

# Entrepreneurship Specialization

e-Business	Specialization	
or		
•••	Services Marketing	(3)
MKTG 2070 or	Buying and Merchandising	3
MKTG 2010	Small Business Management	3
MKTG 2210	Entrepreneurship	6

MKTG 2210	Entrepreneurship	6
BUSN 2170	Web Page Design	2
MKTG 2070	Buying and Merchandising	3
or		
MKTG 1210	Services Marketing	(3)

### or

Retail Mana	gement Specialization	
MKTG 1270	Visual Merchandising	3
MKTG 1370	Consumer Behavior	3
MKTG 2070	Buying and Merchandising	3
MKTG 2270	Retail Operations Management	3

### or

# **Professional Selling Specialization**

MKTG 2060	Marketing Channels
MKTG 1370	Consumer Behavior
MKTG 1210	Services Marketing
MKTG 2160	Advanced Selling

# **Total Credit Hours: 55 Minimum Credit Hours for Graduation**

### NETWORKING SPECIALIST (NS14) DIPLOMA

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Computer Information Systems – Networking Specialist program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics, as well as in the technical areas of computer terminology and concepts, program design and development, and computer networking. Program graduates are qualified for employment as networking specialists.

Basic Skills	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (30 Credit Hours)	
COMP 1000	Introduction to Computers	3
CIST 1001	Computer Concepts	4
CIST xxxx	CIS electives	9
CIST xxxx	Computer Operating System Course	3
CIST 1122	Hardware Installation and Maintenance	4
CIST 1401	Computer Networking Fundamentals	4
or		
CIST 2441 or	CISCO Networking for Home and Small Businesses	(4)
CIST 2451	CISCO Network Fundamentals	(4)
CIST xxxx	Introductory Security Course	3
	e Specialization (16 Credit Hours)	Credit Hours
CISCO Expl	oration Specialization	Credit Hours
	<u> </u>	Credit Hours
CISCO Expl CIST 2451 or	oration Specialization CISCO Networking Fundamentals	4
CISCO Expl CIST 2451 or CIST xxxx	oration Specialization CISCO Networking Fundamentals CIS Networking Elective	4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts	4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts CISCO LAN Switching and Wireless	4 4 4 4
CIST 2451 or CIST XXXX CIST 2452 CIST 2453 CIST 2454	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts	4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts CISCO LAN Switching and Wireless	4 4 4 4
CIST 2451 or CIST xxxx CIST 2452 CIST 2452 CIST 2453 CIST 2454 or	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts CISCO LAN Switching and Wireless	4 4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453 CIST 2454 or Linux/UNIX CIST 2431	oration Specialization CISCO Networking Fundamentals CIS Networking Elective CISCO Routing Protocols and Concepts CISCO LAN Switching and Wireless CISCO Accessing the WAN CISCO Accessing the WAN	4 4 4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453 CIST 2454 or Linux/UNIX CIST 2431 CIST 2432	oration Specialization         CISCO Networking Fundamentals         CIS Networking Elective         CISCO Routing Protocols and Concepts         CISCO LAN Switching and Wireless         CISCO Accessing the WAN         VNIX/Linux Introduction         UNIX/Linux Server	4 4 4 4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453 CIST 2454 or Linux/UNIX CIST 2431 CIST 2432 CIST 2433	oration Specialization         CISCO Networking Fundamentals         CIS Networking Elective         CISCO Routing Protocols and Concepts         CISCO LAN Switching and Wireless         CISCO Accessing the WAN         CSpecialization         UNIX/Linux Introduction         UNIX/Linux Server         UNIX/Linux Advanced Server	4 4 4 4 4 4 4
CISCO Expl CIST 2451 or CIST xxxx CIST 2452 CIST 2453 CIST 2454 or Linux/UNIX CIST 2431 CIST 2432	oration Specialization         CISCO Networking Fundamentals         CIS Networking Elective         CISCO Routing Protocols and Concepts         CISCO LAN Switching and Wireless         CISCO Accessing the WAN         VNIX/Linux Introduction         UNIX/Linux Server	4 4 4 4 4 4

or

(Program requirements continued on following page)

# **NETWORKING SPECIALIST (CONT.)**

### Microsoft Specialization

CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
CIST xxxx	Microsoft Elective	4

### **Total Credit Hours: 54 Minimum Credit Hours for Graduation**

### ADMINISTRATIVE SUPPORT ASSISTANT (AS21) CERTIFICATE

# Campus Availability:

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Administrative Support Assistant program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
BUSN 1240	Office Procedures	3
BUSN 1400	Word Processing Applications	4
BUSN 1440	Document Production	4
XXXX xxxx	Specific Occupational-Guided Electives	6

**Total Credit Hours: 20 Minimum Credit Hours for Graduation** 

### CERTIFIED CUSTOMER SERVICE SPECIALIST (CC81) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Certified Customer Service Specialist (CCSS) program provides training in the core interpersonal and technical skills required to deliver exceptional customer service in a broad range of customer contact jobs.

### **Required Courses**

#### **Credit Hours**

MKTG 1161	Service Industry Business Environment	2
MKTG 1162	Customer Contact Skills	4
MKTG 1163	Computer Skills for Customer Service	2
MKTG 1164	Business Skills for the Customer	2
MKTG 1165	Personal Effectiveness in Customer Service	1

### Total Credit Hours: 11 Minimum Credit Hours for Graduation

### CISCO NETWORK SPECIALIST (CN71) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The CISCO Network Specialist program teaches how to build, maintain, and troubleshoot computer networks. Students also learn how to connect these networks to other networks and the Internet.

Required Courses		Credit Hours
CIST 2451	CISCO Networking Fundamentals	4
CIST 2452	CISCO Routing Protocols and Concepts	4
CIST 2453	CISCO LAN Switching and Wireless	4
CIST 2454	CISCO Accessing the WAN	4

### **Total Credit Hours: 16 Minimum Credit Hours for Graduation**

### COMPTIA A+ CERTIFIED TECHNICIAN PREPARATION (CA71) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The CompTIA A+ Certified Technician Preparation technical certificate of credit program is designed to provide computer users with the skills and knowledge necessary to take the CompTIA A+ certification exam. Earning CompTIA A+ certification shows that the individual possesses the knowledge, technical skills and customer relations skills essential for working as a successful entry-level computer service technician.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
CIST 1001	Computer Concepts	4
CIST 1122	Hardware Installation and Maintenance	4
CIST xxxx	CIS Operating Systems Course	3
CIST xxxx	CIS Elective	4

**Total Credit Hours: 18 Minimum Credit Hours for Graduation** 

## COMPUTER FORENSIC AND INVESTIGATION SPECIALIST (CF31) CERTIFICATE

## (Not Accepting New Students Into This Program)

## **Campus Availability:**

Walker County Campus

## Program Description:

The Computer Forensics and Investigation program includes occupational and specialized courses designed to provide academic and professional training to students in detecting and investigating computer related criminal activity and/or unauthorized use. The curriculum is designed to develop knowledge and skills in technical evidence identification, investigative computer systems, information security, search and seizure, and the administration of criminal sanctions.

Credit Hours
3
4
3
3
4
3
3
3

**Total Credit Hours: 26 Minimum Credit Hours for Graduation** 

## COMPUTER FORENSICS & SECURITY SPECIALIST (CF51) CERTIFICATE

# Campus Availability:

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

# **Program Description:**

Computer Forensics and Security Specialist certificate is designed to give students the knowledge they need to understand how to detect and prevent computer-related criminal activity and/or unauthorized use, including computer systems security.

Required Co	Durses	<b>Credit Hours</b>
CIST 1001	Computer Concepts	4
CIST 1130	Operating Systems Concepts	3
or		
CIST 2411	Microsoft Client	(4)
or		
CIST 2431	UNIX/Linux Introduction	(4)
CIST 1601	Information Security Fundamentals	3
CIST 1401	Computer Networking Fundamentals	4
or		
CIST 2441	CISCO Networking for Home and Small Businesses	(4)
or		
CIST 2451	CISCO Network Fundamentals	(4)
CIST 2601	Implementing Operating Systems Security	4
CIST 2602	Networking Security	4
CIST 2612	Computer Forensics	4

## **Total Credit Hours: 26 Minimum Credit Hours for Graduation**

## COMPUTERIZED ACCOUNTING SPECIALIST (CAY1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Computerized Accounting Specialist technical certificate provides students with skills needed to perform a variety of accounting applications using accounting software and practical accounting procedures. Topics include-- principles of accounting, computerized accounting, spreadsheet fundamentals and basic computers.

Required Courses		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1120	Spreadsheet Applications	4
COMP 1000	Introduction to Computers	3
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
XXXX xxxx	Elective	3

**Total Credit Hours: 21 Minimum Credit Hours for Graduation** 

#### DATA ENTRY CLERK (DEC1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus

## **Program Description:**

This program prepares individuals to perform basic data and text entry using standard and customized software products. Includes instructions in keyboarding skills, personal computer and work station operation, and various interactive software programs used for tasks such as word processing, spreadsheets, databases and others.

Required Courses	
Electronic Calculators	2
Introduction to Computers	3
Business Math	3
Foundations of Mathematics	(3)
Document Production	4
Specific Occupational-Guided Elective	3
	Electronic Calculators Introduction to Computers Business Math Foundations of Mathematics Document Production

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

## DATA MANAGEMENT (DM11) CERTIFICATE

## (Not Accepting New Students Into This Program)

## **Campus Availability:**

Walker County Campus

## **Program Description:**

The Data Management certificate provides instruction in the use of job-specific software. It is intended for individuals whose job requirements demand high skill levels in the management and manipulation of data, including the storage and retrieval of data. The certificate stresses the mastery of advanced spreadsheet skills, desktop publishing, and database skills.

Required Courses		Credit Hours
BUSN 1400	Word Processing Applications	4
CIST 1101	Working with Microsoft Windows	3
CIST 2120	Supporting Application Software	4
COMP 1000	Introduction to Computers	3
BUSN 1440	Document Production	4
CIST 2129	Comprehensive Database Techniques	4

Total Credit Hours: 22 Minimum Credit Hours for Graduation

## **ENTREPRENEURSHIP (EN11)** CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus

## **Program Description:**

This program generally prepares individuals to perform development, marketing, and management functions associated with owning and operating a business.

Required Courses
------------------

Required Courses		Credit Hours
MKTG 1130	Business Regulations and Compliance	3
MGMT 1100	Principles of Management	3
or		
MKTG 2010	Small Business Management	(3)
MKTG 2210	Entrepreneurship	6

**Total Credit Hours: 12 Minimum Credit Hours for Graduation** 

#### HELP DESK SPECIALIST (HD41) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

**Program Description:** The Help Desk Specialist program teaches how to maintain and troubleshoot computer hardware and software and be a support person to handle calls from customers.

#### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required.

Required Courses		<b>Credit Hours</b>
CIST 1001	Computer Concepts	4
CIST xxxx	CIS Operating Systems Course	3
CIST 1122	Hardware Installation and Maintenance	4
COMP 1000	Introduction to Computers	3
CIST 1401	Computer Networking Fundamentals	4
or		
CIST 2441	Networking for Home and Small Businesses	(4)
or		
CIST 2451	CISCO Networking Fundamentals	(4)
CIST 2130	Desktop Support Concepts	2
CIST xxxx	CIS Elective	4

#### Total Credit Hours: 24 Minimum Credit Hours for Graduation

## HUMAN RESOURCE MANAGEMENT SPECIALIST (HRM1) CERTIFICATE

# **Campus Availability:**

• Gordon County Campus

• Whitfield Murray Campus

## **Program Description:**

The Human Resource Management Specialist Certificate prepares individuals to perform human resources functions in the HR Department in most companies. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management.

Required Courses		<b>Credit Hours</b>	
MGMT 1105	Organizational Behavior	3	
MGMT 2115	Human Resource Management	3	
MGMT 2125	Performance Management	3	
MGMT 2130	Employee Training and Development	3	
MGMT 1110	Employment Law	3	
or			
MKTG 1130	Business Regulations and Compliance	(3)	
or			
MGMT 2120	Labor Management Relations	(3)	
XXXX xxxx	Guided Elective	3	
Table I Cardina			

**Total Credit Hours: 18 Minimum Credit Hours for Graduation** 

## **INTERNET SPECIALIST WEB SITE DEVELOPER (ISE1)** CERTIFICATE

## **Campus Availability:**

• Polk County Campus

• Walker County Campus

**Program Description:** The curriculum in the Internet Specialist Web Site Design TCC program prepares the student to create and maintain professional, high-quality web sites. Program graduates will be competent in the technical areas of web design, including web graphic design, XHTML, scripting, web application server-side languages, database driven content, web project management, internet security, and mobile applications. Various software tools will be used throughout the curriculum including Microsoft Visual Studio, Adobe Web Suite and/or open source products. Program graduates earn a Computer Information Systems Technology/Internet Specialist – Web Site Developer TCC and will have the skills necessary for employment in the web design field or to work as a free lance web designer. The purpose of this certificate is to provide training opportunities for persons already employed in the computer industry or already trained in a related computer area who wish to upgrade their skills with advanced courses.

## Required Courses

Required Co	Durses	<b>Credit Hours</b>
CIST 1305	Program Design and Development	3
CIST 1220	Structured Query Language	4
CIST 1510	Web Development I	3
CIST 1520	Scripting Technologies	3 3 3 3 3 3 3 3 3
CIST 1530	Web Graphics I	3
CIST 2550	Web Development II	3
CIST 1540	Web Animation I	3
CIST 1601	Information Security Fundamentals	3
CIST 2510	Web Technologies	3
CIST 2541	Web Animation II	3
or		
CIST 2531	Web Graphics II	(3)
CIST 2560	Web Application Programming I	4
or		
CIST 2570	Open Source Web Application Programming I	(4)
or		
CIST 2381	Mobile Application Development	(4)
or		
CIST 2371	Java Programming I	(4)
Or	Viewel Denie I	(A)
CIST 2311	Visual Basic I	(4)
Or		(A)
CIST 2351	PHP Programming I	(4)
Or	C# Brogramming I	$(\Lambda)$
CIST 2341	C# Programming I	(4)
Or	Interactive and Social Apps Integration	$(\Lambda)$
CIST 2580	Interactive and Social Apps Integration	(4)

#### Total Credit Hours: 35 Minimum Credit Hours for Graduation

## LINUX/UNIX SYSTEM ADMINISTRATOR (LA31) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

**Program Description:** The Linux/UNIX System Administrator program is designed to train students in the skills needed to design, build, and maintain UNIX/Linux networks.

Required Courses		Credit Hours
CIST 2431	UNIX/Linux Introduction	4
CIST 2432	UNIX/Linux Server	4
CIST 2433	UNIX/Linux Advanced Server	4
CIST 2434	UNIX/Linux Scripting	4

**Total Credit Hours: 16 Minimum Credit Hours for Graduation** 

## MARKETING SPECIALIST (MS21) CERTIFICATE

## **Campus Availability:**

• Floyd County Campus

## **Program Description:**

The marketing specialist program prepares individuals to execute a company's marketing plans.

Required Co	ourses	<b>Credit Hours</b>
MKTG 1100	Principles of Marketing	3
MKTG 1190	Integrated Marketing Communications	3
MKTG 1160	Professional Selling	3
MKTG xxxx	Marketing Elective	3

#### Total Credit Hours: 12 Minimum Credit Hours for Graduation

#### MEDICAL CODING (MC41) CERTIFICATE

## **Campus Availability:**

• Floyd County Campus

## **Program Description:**

The Medical Coding Technical Certificate of Credit provides a basic short-term academic credential with potential for future program credit. The curriculum provides advanced training in coding skills for persons wanting to progress in their occupations or who want to prepare for full-time or part-time employment in the medical field. The Medical Coding Technical Certificate of Credit program provides basic training in anatomy and physiology, medical terminology, and medical procedural and physicians procedural coding skills.

#### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required.

## **Required Courses**

Required Courses		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1090	Medical Terminology for Allied Health Sciences	2
MAST 1120	Human Pathological Conditions in Medical Office	3
BUSN 1440	Document Production	4
ENGL 1010	Fundamentals of English I	3
MAST 1510	Medical Billing and Coding I	2
MAST 1520	Medical Billing and Coding II	3
MAST 1530	Medical Procedural Coding	2

**Total Credit Hours: 24 Minimum Credit Hours for Graduation** 

## MEDICAL FRONT OFFICE ASSISTANT (MF21) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Polk County Campus
- Walker County Campus

## **Program Description:**

The Medical Front Office Assistant certificate is designed to provide the educational opportunities to individuals that will enable them to obtain the knowledge and skills necessary to secure an entry level position as a receptionist in a physician's office, hospital, clinic, or other related areas. Technical courses apply to the degree or diploma program in office technology.

Required Courses		<b>Credit Hours</b>
ALHS 1090	Medical Terminology for Allied Health Sciences	2
or		
BUSN 2300	Medical Terminology	(2)
BUSN 1440	Document Production	4
BUSN 2340	Medical Administrative Procedures	4
ENGL 1010	Fundamentals of English I	3
COMP 1000	Introduction to Computers	3
XXXX xxxx	Specific Occupational-Guided Electives (See Advisor)	6
Total Credit Hours: 22 Minimum Credit Hours for Graduation		

## MEDICAL LANGUAGE SPECIALIST (MLS1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

## **Program Description:**

The Medical Language Specialist program includes instruction in transcription, proofreading, and report analysis while applying medical terminology and computer application skills.

Required Courses		<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
MAST 1120	Human Pathological Conditions in the Medical Office	3
ENGL 1010	Fundamentals of English I	3
BUSN 2310	Anatomy and Terminology for the Medical Admin Assistar	nt 3
or		
ALHS 1010	Introduction to Anatomy and Physiology	(4)
or		
ALHS 1011	Anatomy and Physiology	(5)
BUSN 1440	Document Production	4
BUSN 2320	Medical Document Processing/Transcription	4
ALHS 1090	Medical Terminology for Allied Health Sciences	2
or		
BUSN 2300	Medical Terminology	(2)
BUSN 2330	Advanced Medical Document Processing/Transcription	4
XXXX xxxx	Specific Occupational-Guided Electives (See Advisor)	4

# **Total Credit Hours: 30 Minimum Credit Hours for Graduation**

## MICROSOFT EXCEL APPLICATION SPECIALIST (ME21) CERTIFICATE

## **Campus Availability:**

- Flovd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The certificate program provides students with the knowledge and skills to perform intermediate and advanced Microsoft Excel. Prepares students with the skills necessary to obtain the expert user certification.

#### **Entrance Requirements:**

Education: High school diploma or GED<sup>®</sup> is not required.

## Required Courses

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
XXXX xxxx	Computer Information Systems Elective	3

#### **Total Credit Hours: 9 Minimum Credit Hours for Graduation**

## MICROSOFT NETWORK ADMINISTRATOR (MS11) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Microsoft Network Administrator certificate provides training in Microsoft networking. This certificate will prepare the student for an entry-level computer networking position. Skills taught include implementation of Microsoft operating systems, implementation of Microsoft servers, and networking Infrastructure. This certificate prepares the student to sit for the Microsoft Certified IP Professional (MCITP) networking exam. Hands-on labs provide students with real world simulations.

Required Courses		Credit Hours
CIST 2411	Microsoft Client	4
CIST 2412	Microsoft Server Directory Services	4
CIST 2413	Microsoft Server Infrastructure	4
(Choose one Microsoft Elective Below - 4 credit hours)		
CIST 2414	Microsoft Server Administrator	4
or		
CIST 2420	Microsoft Exchange Server	(4)

## **Total Credit Hours: 16 Minimum Credit Hours for Graduation**

## MICROSOFT OFFICE APPLICATION PROFESSIONAL (MF41) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

## **Program Description:**

The Microsoft Office Applications Professional certificate program provides students with the knowledge and skills to perform word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide handson instruction for developing foundation skills for office assistant careers as well as to prepare students for Microsoft Certified Application Specialist (MCAS) certification. Graduates of the program receive a Microsoft Office Applications Professional Technical Certificate of Credit.

## **Required Courses**

#### **Credit Hours**

COMP 1000	Introduction to Computers	3
XXXX xxxx	Occupational-Guided Elective	3
BUSN 1400	Word Processing Applications	4
BUSN 1420	Database Applications	4
BUSN 1410	Spreadsheet Concepts and Applications	4
BUSN 1430	Desktop Publishing and Presentation Applications	4

## **Total Credit Hours: 22 Minimum Credit Hours for Graduation**

## MICROSOFT OFFICE APPLICATION SPECIALIST (MF51) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Microsoft Office Application Specialist certificate program enables the student to upgrade his/her microcomputer application software skills and prepare for certification.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
CIST 2126	Comprehensive Presentations and eMail Techniques	3
CIST 2127	Comprehensive Word Processing Techniques	3
CIST 2128	Comprehensive Spreadsheet Techniques	3
CIST 2129	Comprehensive Database Techniques	4

#### Total Credit Hours: 16 Minimum Credit Hours for Graduation

## MICROSOFT WORD APPLICATION SPECIALIST (MW11) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The certificate program provides students with the knowledge and skills to perform work processing, spreadsheet, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
CIST 1102	Keyboarding	3
CIST 2127	Comprehensive Word Processing Techniques	3

**Total Credit Hours: 9 Minimum Credit Hours for Graduation** 

## OFFICE ACCOUNTING SPECIALIST (OA31) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Office Accounting Specialist technical certificate provides entry-level office accounting skills. Topics include—principles of accounting, computerized accounting and basic computer skills.

Required Courses		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
COMP 1000	Introduction to Computers	3

**Total Credit Hours: 14 Minimum Credit Hours for Graduation** 

## OPERATIONS MANAGEMENT SPECIALIST (OM11) CERTIFICATE

## **Campus Availability:**

- Gordon County Campus
- Whitfield Murray Campus

## **Program Description:**

The Operations Management Specialist Certificate prepares individuals to manage and direct physical and technical functions of a variety business or industrial organization. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
MGMT 1100	Principles of Management	3
MGMT 2125	Performance Management	3
MGMT 2130	Employee Training and Development	3
MGMT 2200	Production/Operations Management	3
MGMT 2210	Project Management	3

## Total Credit Hours: 18 Minimum Credit Hours for Graduation

## **PAYROLL ACCOUNTING SPECIALIST (PA61)** CERTIFICATE

## **Campus Availability:**

- Flovd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Payroll Accounting Specialist technical certificate provides entry-level skills into payroll accounting. Topics include: principles of accounting, computerized accounting, principles of payroll accounting, mathematics and basic computer use.

Required Courses		Credit Hours
ACCT 1100	Financial Accounting I	4
ACCT 1105	Financial Accounting II	4
ACCT 1115	Computerized Accounting	3
ACCT 1130	Payroll Accounting	3
COMP 1000	Introduction to Computers	3

## Total Credit Hours: 17 Minimum Credit Hours for Graduation

## PC REPAIR AND NETWORK TECHNICIAN (PR21) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

## **Program Description:**

The PC Repair and Network Technician certificate prepares the student with the skills needed to perform personal computer troubleshooting and repair.

## **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required.

## **Required Courses**

Required Courses		<b>Credit Hours</b>
CIST 1001	Computer Concepts	4
CIST xxxx	CIS Operating Systems Course	3
CIST 1122	Hardware Installation and Maintenance	4
COMP 1000	Introduction to Computers	3
CIST 1401	Computer Networking Fundamentals	4
or		
CIST 2441	CISCO Networking for Home and Small Businesses	(4)
or		
CIST 2451	CISCO Networking Fundamentals	(4)
Total Credit I	Jours: 18 Minimum Credit Hours for Graduation	

Total Credit Hours: 18 Minimum Credit Hours for Graduation

## SUPERVISOR/MANAGER SPECIALIST (SS31) CERTIFICATE

## **Campus Availability:**

• Walker County Campus

## **Program Description:**

The Supervisor/Manager Specialist Certificate prepares individuals to become supervisors in business, commercial or manufacturing facilities. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required for job acquisition, retention and advancement in management. Graduates will receive a Supervisor/Manager Specialist TCC.

Required Courses		<b>Credit Hours</b>
MGMT 1100	Principles of Management	3
MGMT 1115	Leadership	3
MGMT 2115	Human Resource Management	3
MGMT 1110	Employment Law	3
or		
MKTG 1130	Business Regulations and Compliance	(3)
or		
MGMT 2120	Labor Management Relations	(3)

## **Total Credit Hours: 12 Minimum Credit Hours for Graduation**

#### TAX PREPARATION SPECIALIST (TPS1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus

## **Program Description:**

The Tax Preparation Specialist certificate is designed to provide entry-level skills for tax preparers. Topics include: principles of accounting, tax accounting, business calculators, mathematics, and basic computer skills.

Required Courses		Credit Hours
COMP 1000	Introduction to Computers	3
ACCT 1100	Financial Accounting I	4
ACCT 1125	Individual Tax Accounting	3
ACCT 2120	Business Tax Accounting	3
ACCT XXXX	Accounting Elective	3

Total Credit Hours: 16 Minimum Credit Hours for Graduation

## TECHNICAL MANAGEMENT SPECIALIST (TMS1) CERTIFICATE

# **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Technical Management Specialist Certificate is designed to build upon a student's previously achieved TCC, Diploma or Associate Degree and add the management component to their education. Learning opportunities will introduce, develop and reinforce students' knowledge, skills and attitudes required to work in the student's current area of expertise. Graduates will receive a Technical Management Specialist TCC.

Required Courses		<b>Credit Hours</b>
MGMT 1100	Principles of Management	3
MGMT 1110	Employment Law	3
or		
MKTG 1130	Business Regulations and Compliance	(3)
or		
MGMT 2120	Labor Management Relations	(3)
MGMT 2115	Human Resource Management	3
COMP 1000	Introduction to Computers	3
XXXX xxxx	Specific Occupational-Guided Electives (See Advisor)	12

**Total Credit Hours: 24 Minimum Credit Hours for Graduation** 

## TECHNICAL SPECIALIST (TC31) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

## **Program Description:**

The purpose of this certificate is to prepare students for positions in business that require technical proficiency to translate technical information to various audiences and in various formats using written and oral communication skills.

# Required Courses

## **Credit Hours**

ENGL 1101	Composition and Rhetoric	3
COMP 1000	Introduction to Computers	3
XXXX xxxx	Humanities/Fine Arts Electives	6
	(HUMN 1101, MUSC 1101, ARTS 1101, ENGL 2130)	
XXXX xxxx	Social/Behavioral Science Electives	6
	(PSYC 1101, ECON 1101, ECON 2105, SOCI 1101, POLS 1	101,
	HIST 1111, HIST 1112, HIST 2111, HIST 2112)	
XXXX xxxx	Natural Sciences/Mathematics	3
	(MATH 1101, MATH 1111, MAT 1112, MAT 1113, BIOL 111	
	1111L, CHEM 1151 & CHEM 1151L, PHYS 1110 & PHYS 11	10L)
XXXX xxxx	General Education Core Electives	6-12
XXXX xxxx	Occupational Guided Electives	9-12

(Note: Some classes may only be available on the Floyd and Walker County Campuses)

**Total Credit Hours: 36 Minimum Credit Hours for Graduation** 

# **Health Technologies**

The following associate of applied science (A.A.S.) degree, diploma, and certificate programs are located in the Health Technologies Division. All programs are not offered on every campus. As with all GNTC programs, students interested in Health Technologies Division programs should consult specific program information in this catalog to see where the program is offered and visit or call the Student Success Center to discuss program admission requirements and entry dates. The following is a list of the Health Technology degrees, diplomas, and certificates that GNTC offers. The letters following the program names identify the campuses where the programs are taught. (F-Floyd County Campus, G-Gordon County Campus, P-Polk County Campus, and W-Walker County Campus).

# Associate of Applied Science Degree Programs

Cardiovascular Technology (CT13) - W (*Not Accepting New Students Into This Program*) Diagnostic Medical Sonography (DMS3) - F Echocardiography (EC23) - F Neuromuscular Therapist (NT13) - F Occupational Therapy Assistant (OTA3) - W Pharmacy Technology (PT23) - W Radiation Therapy (RT13) - F Radiologic Technology (RT23) - F Respiratory Care (RCT3) - F Vascular Technology (VT13) - F

# Diploma Programs

Dental Assisting (DA12) - G, P Diagnostic Medical Sonography (DMS4) - F (*Not Accepting New Students Into This Program*) Echocardiography (EC14) - F (*Not Accepting New Students Into This Program*) Neuromuscular Therapist (NT12) - F Pharmacy Technology (PT22) - W Radiation Therapy (RT14) - F Radiologic Technology (RT24) - F (*Not Accepting New Students Into This Program*) Vascular Technology (VT14) - F- (*Not Accepting New Students Into This Program*)

# **Certificate Programs**

Health Care Assistant (HA21) - F, G, P, W Health Care Science (HS21) - F, G, P, W Mammography (MA11) - F Pharmacy Assistant (PB71) - W Phlebotomy Technician (PT21) - W

Program lengths vary from three months to two years. While most pre-occupational curriculum are available during the day and evening on GNTC's four campuses, most occupational curriculum are held during the day on the Floyd County and Walker County Campuses.

## **Enrollment Procedures and Information for Health Technologies Georgia Northwestern Technical College**

## I. Admission Procedures

- A. Refer to the Admissions Procedures outlined in the Admissions Policy and complete all requirements.
- B. Complete all requirements for entry in the health technology program of choice. Health technology programs each have additional entrance requirements or pre-occupational curriculum that should be taken prior to taking occupational curriculum or receiving official acceptance to the program. Advisors will discuss these requirements with their students. Specific requirements are listed under the program descriptions. When a student is in the final semester of completing courses, he/she will complete a form in the Office of Student Affairs requesting a review of course work at the end of that semester. This form will be available to students during the third week of the semester. An announcement will be made to students regarding this process.
- C. All students who complete their pre-occupational curriculum with a "C" or better, apply for addition to the Health Technology eligibility pool, and attend the mandatory Health Technology program orientation will be added to the Health Technology eligibility pool. If a student has not satisfactorily completed the pre-occupational curriculum (example: did not earn a grade of "C" or higher in any required pre-occupational course or did not attend the mandatory Health Technology program orientation), the student's name will not be placed in the Health Technology eligibility pool for his/ her program of choice. Once the student's transcript has been reviewed, and it is determined that all requirements have been met for placement in the Health Technology eligibility pool, students will be notified to contact the Student Success Center at 706-802-5381 to arrange a time to take the Psychological Services Bureau Health Aptitude Exam (PSB). Once the entrance exam is completed, each student's total score will be calculated, and he/she can be entered into the Health Technology eligibility pool. During the semester before the semester students are selected to begin occupational curriculum (for the program selected), the Health Technologies administration staff will use the competitive admissions policies and procedures for each individual program to select those most gualified for entry into the program. All students in the eligibility pool will be notified of their status and advised of their options.

\*Students on Health Technologies waiting lists. Current health students who entered the college several semesters ago, and whose names remain on waiting lists for entry into specific programs, will continue to be admitted to individual health programs from the waiting list until the waiting list for each health program is exhausted. If an applicant is unable to enroll in the semester for which he/she receives notification to enter, he/she will be allowed to defer one time only. This deferral will allow the applicant to enter with the next class selected for his/her chosen program of study. If the applicant is unable to enter with the second class, the applicant's name will be removed from the waiting list, and he/she can reapply for the program via the current competitive admissions process.

## Note: The following Health Technology programs located on the Walker County campus will continue to utilize their current admission policies and procedures on the Walker County Campus until further notice: Pharmacy Technology (PT23 & PT22) and Pharmacy Assistant (PB71).

- D. Upon completion of all items (A-C) above, students will receive official notification of acceptance and directions on how to complete enrollment into the Health Technology program of choice. Or, the student will be notified of his/her non-selected status and invited to make an appointment with the Health Technologies administration offices to discuss their options.
- E. Attend mandatory programmatic orientation prior to beginning occupational curriculum. At the orientation session, each student will be given directions on how to complete all necessary steps to enter the Health Technology program of choice. These requirements include, but are not limited to the following:
  - •Return completed Medical Report Form certifying ability to meet physical and mental performance requirements. If selected by a program, a physical examination is required before attending occupational curriculum in the Health Technologies Division.
  - •Obtain approved Criminal History Report if selected by a program. A completed report from an approved provider must be submitted prior to entry into any Health Technology program. Contact the Health Technologies administration office for the Floyd County campus or the Nursing and Allied Health Technologies division for the Walker County campus for an approved list of providers.
  - •Complete a Health Stream or Tennessee Clinical Placement System TCPS orientation if attending the Walker County Campus. The cost is ten dollars (\$10). This fee for online in-services is required by all area hospitals that serve as clinical sites for GNTC in Walker County, Whitfield County, and Hamilton County, TN.
  - •Pay Liability Insurance Fee for Health Technology student: \$12

## II. Admissions Categories

Admission to the Health Technologies Division will be in one of the following categories. Minimum admission requirements are implemented for each standard degree, diploma, or certificate program.

- a. Learning Support/Provisional (During pre-occupational curriculum only)
- b. Health Technology Pre-occupational
- c. Occupational

A. <u>Learning Support/Provisional Admissions</u>: Persons who seek to enroll at Georgia Northwestern Technical College and do not satisfy required admission standards for entry into the Health Technologies programs are classified as Learning Support or Provisional admission status as defined in the Admissions Status section of the Admissions Policy. Upon completion of Learning Support or Provisional status requirements, students will be classified as Regular status.

B. <u>Health Technology - Pre-occupational</u>: All students taking pre-occupational curriculum in preparation for admission into a Health Technology program are enrolled in either Health Care Assistant (HA21), Health Care Science (HS21). This qualifies the student to receive financial aid while taking the required courses for

admission into the Health Technology program of choice.

C. <u>Occupational Program</u>: These students are accepted into their respective programs and have completed all pre-occupational curriculum, all program specific requirements, and are either waiting to start occupational curriculum or are currently taking occupational curriculum.

## **III. Course Validity Duration**

Certain pre-occupational curriculum are considered to be of key importance to program completion and are only valid within a set time frame preceding occupational program entry. Students who have completed bachelor degrees, have been employed three of the past five years in an allied health occupation, involved in direct patient care, or are currently in the Health Technology - (program designated) category may apply for a duration extension at the discretion of the Health Technologies Division faculty. Students may take and pass an exam covering the objectives of the course if the duration of acceptance time has elapsed.

Course	Duration of acceptance
Algebraic Concepts	2 years
Anatomy & Physiology with lab	5 years
Anatomy & Physiology without lab	2 years
College Chemistry	5 years
College Algebra	5 years
General Mathematics	2 years
College Physics	5 years
Psychology	No Limit
English	No Limit
Introduction to Microbiology with lab	5 years
Introduction to Computers	No Limit
*Patient Care/Introduction to Health Care	5 years
Medical Ethics & Law	5 years
Medical Terminology	5 years

\*To receive credit for this course, students must be able to demonstrate the necessary practical factors associated with hand washing, gloving, isolation techniques, and vital sign determination. A current health care provider level CPR card is required as well.

## **COMPETENCY TESTS**

Competency tests are administered each semester for persons wishing to establish credit for courses they have taken, for which they received a grade of "C" or better, which have exceeded the course validity limit. These courses may be transfer courses or courses taken at GNTC. The competency test establishes that they still retain competency in that subject.

For details on competency testing at GNTC, refer to the "Academic Information" section of this catalog.

Upon petition from a student, credit by examination may be given. If circumstantial evidence, such as experiential learning, indicates the probability of special technical aptitude or knowledge on the part of the petitioning student, a written, oral, and/or performance examination will be developed and administered by an instructor of the course. Permission to take such an examination must be granted by a health technol-

ogy or nursing and allied health instructor. Students who score 80% or higher on all components of the examination will be awarded a grade of "EX" for the course. The "EX" indicates credit by examination. The "EX" carries no grade points, but the number of credit hours normally assigned to the course will be awarded. A student is eligible to challenge a course only one time. The challenge exam must be taken before the first day of the class in which the student is enrolled. If the student misses his/her schedule exam appointment, he/she must complete another application with payment and reschedule with the instructor.

# **Entrance Requirements for Health Technologies**

# I. Age

17 years old for entrance into Health Technology pre-occupational curriculum

18 years old for entrance into Health Technology programs

# II. Education

A High school diploma or GED<sup>®</sup> is required for all Health Technology programs. Detailed information about education requirements is found under the Education section of the Admissions Policy.

# III. Health

Applicants must be able to attend school regularly and meet the physical and mental performance requirements of their course, including those required at the medical affiliates. All Health Technology programs require completion of the Medical Report Form after receiving official acceptance into the program. Medical Report Forms cannot be issued prior to program entry.

# IV. Assessment Results

Applicants for all health programs must make the minimum required scores in reading, writing, and numeric skills (including algebra for some programs) on the Admission Placement Test (ASSET/COMPASS) or one of the approved entrance tests (example, SAT, ACT) to be admitted as regular students. Generally, students are not admitted to Health Technology programs on a provisional basis. An applicant who has completed, with a "C" grade or better, transferable English and math courses from an accredited institution may be exempt from taking the entrance examination.

# Minimum Required Scores

Refer to the Required Minimum Scores for Regular Admission section of the Admissions Policy for required placement test scores for Health Technology programs.

# V. Criminal Background Results

Each student in Health Technology must have a criminal background check conducted by an approved agency. Students may contact the Health Technologies Division administration staff (Floyd County Campus) at 706-295-6882 or 706-295-6966 or the Health Technologies Division administration staff (Walker County Campus) at 706-764-3851 or 706-764-3520 to obtain a list of approved agencies. Once the approved background check has been completed, any questionable results will be reviewed by the clinical affiliates at which the students would be performing their clinical practicum. If the clinical affiliates cannot allow a student to participate at their sites due to the results of the criminal background check, the program faculty will make an effort to place the student at another clinical affiliate. If the faculty is unable to find a clinical affiliate that will allow the student to participate in clinical practicum at their sites, the student will not be able to enter or complete the Health Technology program.

Note: Some Health Technology programs have additional requirements, such as volunteer or observation time, additional course completion, additional test scores, or state licensure prerequisites. Please refer to the specific program description for more detailed information. Also, some clinical affiliates may require a specific background vendor and/or drug testing in order to attend clinicals at that institution.

## **Physical and Mental Performance Requirements** for Health Technologies

The Health Technologies Division faculty has specified the following non-academic criteria (technical standards) which all applicants and enrolled students are expected to meet in order to participate in the Health Technologies Division programs and professional practice. The ability to meet these requirements is documented by physical exam. A student is considered compliant when the GNTC Health Technology Medical Report Form has been completed and signed by a physician, nurse practitioner, or physician's assistant.

All candidates for a Health Technology degree must meet intellectual, physical, and social core performance standards necessary to provide safe patient care in an independent manner. The areas below include examples of necessary activities and skills but are not all-inclusive.

1. Critical Thinking: Critical thinking ability sufficient for clinical judgment. Examples include identification of cause/effect relationships in clinical situations, development of plans of care, transferring knowledge from one situation to another, evaluating outcomes; problem solving; prioritizing; and using short and long term memory. \*, \*\*

2. Interpersonal: Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural and intellectual backgrounds. Examples include establishing rapport with patients/clients, families, and colleagues; negotiation of interpersonal conflict; and respect of cultural diversity.

3. Communication: Communication abilities sufficient for verbal and written interaction with others. Examples include explanation of treatment procedures; initiation of health teaching, documentation and interpretation of nursing actions and patient/client responses, and written and oral reports to other health care professionals.\*

4. Mobility: Physical abilities sufficient for movement from room to room and in small spaces. Examples include moving around in a patient's room, work spaces and treatment areas; administration of cardiopulmonary procedures such as resuscitation; sitting or standing and maintaining balance for long periods; twisting, bending, stooping; moving quickly in response to possible emergencies; pushing, pulling, lifting or supporting a dependent adult patient; squeezing with hands and fingers; and repetitive movements.

5. Motor Skills: Gross and fine motor abilities sufficient for providing safe, effective nursing and patient care. Examples include calibration and use of

equipment, positioning of dependent adult patients/clients, grasping and manipulation of small objects/instruments, using a computer keyboard, and writing with a pen.\*

6. Hearing: Auditory ability sufficient for monitoring and assessing health needs. Examples include hearing monitor and pump alarms, emergency signals fire alarms, auscultatory sounds, and cries for help.

7. Visual: Visual ability sufficient for observation and assessment necessary in nursing care. Examples include observation of patient/client responses such as respiratory rate and depth, skin color, and other physical signs; visualization of monitors, watches with second hands, medication labels and vials, and increments on a medication syringe; visualization of objects from twenty inches to twenty feet away; use of depth perception and peripheral vision; distinguishing colors; and reading written documents.

8. Tactile: Tactile ability sufficient for physical assessment. Examples include performance of palpation, functions of physical examination (such as discrimination of pulses and detection of temperature), and functions related to therapeutic intervention (such as insertion of a catheter).

9. Emotional: Emotional stability sufficient to tolerate rapidly changing conditions and environmental stress. Examples include establishment of therapeutic interpersonal boundaries, providing patients/clients with emotional support, adapting to changing conditions in the work environment and stress, dealing with unexpected or unpredictable events, maintaining focus on task, performing multiple tasks concurrently, and being able to handle strong emotions

\*Is additionally documented by satisfactory completion of the pre-occupational course requirements.

\*\*Is additionally documented by satisfactory completion of the ASSET/COMPASS entrance exam requirements of the Health Technology programs.

# Health Technology Program Accreditations

Some individual programs within the Health Technologies Division hold programspecific accreditations or state required division approvals. Individual program accreditations and approval are identified below:

## **Dental Assisting**

The Dental Assisting program at Georgia Northwestern Technical College is accredited by the Commission on Dental Accreditation, American Dental Association (www.ada. org).

Commission on Dental Accreditation American Dental Association 211 East Chicago Avenue Chicago, Illinois 60611 Telephone: 312-440-4653

## Diagnostic Medical Sonography Echocardiography Vascular Technology

The Ultrasound programs at Georgia Northwestern Technical College are accredited by the Commission on Accreditation of Allied Health Education Programs (www. caahep.org) upon the recommendation of Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS).

Commission on Accreditation of Allied Health Education Programs 1361 Park Street Clearwater, FL 33756 Telephone: 727-210-2350

## **Occupational Therapy Assistant**

The Occupational Therapy Assistant program at Georgia Northwestern Technical College is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). www.aota.org American Occupational Therapy Assistant Association 4720 Montgomery Lane P.O. Box 31220 Bethesda, MD 20824-1220 Telephone: 301-652-2682

#### Radiation Therapy Radiologic Technology

The Radiation Therapy and Radiologic Technology programs at Georgia Northwestern Technical College are accredited by the Joint Review Committee on Education for Radiologic Technology (www.jrcert.org). JRCERT 20 N. Wacker Drive Suite 2850 Chicago, IL 60606-3182 Telephone: 312-704-5300

## **Respiratory Care**

The Respiratory Care program at Georgia Northwestern Technical College is accredited by the Commission on Accreditation for Respiratory Care (www.coarc. com). Commission on Accreditation for Respiratory Care 1248 Harwood Road Bedford, Texas 76021-4244 (817) 283-2835

## **Pre-Occupational and Occupational Course Requirements**

## **Degree and Diploma Programs**

Courses taken during a student's pre-occupational period provide a foundation of knowledge built upon later during the occupational program courses. Preoccupational courses must be taken before a student enters the program of choice for which they qualify. Occupational courses must be taken after a student is accepted and enters the program for which they qualify. Specific pre-occupational and occupational course requirements for each degree and diploma program are listed on the following pages. See the individual program advisor for more information.

## CARDIOVASCULAR TECHNOLOGY (CT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### (Not Accepting New Students Into This Program)

## Program Description:

Cardiovascular Technology is a health technology profession centered on the evaluation, diagnosis and treatment of patients with cardiac diseases. A cardiovascular technologist performs examinations at the request or under direct supervision of a physician, is proficient in the use of analytical equipment, and provides a foundation of data from which a correct anatomic and physiologic diagnosis may be made.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum, fall semester for occupational curriculum.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (26 Credit Hours)	<b>Credit Hours</b>
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3 1
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3 3 3 3 3 3
HUMN 1101	Introduction to Humanities	3
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3
PSYC 1101	Introductory Psychology	3
SPCH 1101	Public Speaking	3
Occupation	al Curriculum (66 Credit Hours)	<b>Credit Hours</b>
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3 3 2
CAVT 1100	Cardiac Catheterization Fundamentals	3
CAVT 1002	Medical Physics	
CAVT 1020	Cardiac Catheterization I	4
CAVT 1021	Cardiac Catheterization Clinical I	3
CAVT 1030	Electrophysiology and Cardiac Anatomy	4
CAVT 1080	Advanced Hemodynamics and Cardiac Physiology	4
CAVT 1090	Drug Calculations and Administration	2
CAVT 2020	Cardiac Catheterization II	4
CAVT 2030	Cardiac Catheterization Clinical II	6
CAVT 2040	Cardiac Catheterization III	4
CAVT 2050	Cardiac Catheterization Clinical III	7
CAVT 2060	Cardiac Catheterization Clinical IV	11
CAVT 2070	Cardiac Catheterization Registry Review I	1
CAVT 2080	Cardiac Catheterization Registry Review II	1
ECHO 1550	Professional Development	1

#### **Total Credit Hours: 92 Minimum Credit Hours for Graduation**

## DIAGNOSTIC MEDICAL SONOGRAPHY (DMS3) ASSOCIATE OF APPLIED SCIENCE DEGREE

## **Campus Availability:**

• Floyd County Campus

## Program Description:

The Diagnostic Medical Sonography Associate Degree program is a sequence of courses that provides educational opportunities to individuals in didactic and clinical environments that will enable them to gain skills, knowledge and attitudes necessary to graduate and become successful entry-level employees in the field of Diagnostic Medical Sonography. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. Sonographers use high frequency sound waves to produce dynamic visual pictures of internal body structures. The images are evaluated by physicians to make a medical diagnosis. Course work includes sonographic physics, sonographic identification of normal and abnormal anatomy, physiology, pathology, and pathophysiology of the abdomen, pelvis, and small parts of the adult, pediatric, and fetal patient, clinical application courses, interventional sonography, journal and case study review, and comprehensive registry reviews.

**Entrance Dates:** Beginning of any semester for prerequisite courses, fall semester for occupational curriculum.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

/	3,1 3	
Pre-Occupa	tional Curriculum (30 Credit Hours)	Credit Hours
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3 3 3 3
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3
PHYS 1110	Conceptual Physics	
PHYS 1110L	Conceptual Physics Lab	1
SPCH 1101	Public Speaking	3 3 3
PSYC 1101	Introductory Psychology	3
XXXX xxxx	Humanities/Fine Arts Elective	3
Occupationa		Credit Hours
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
DMSO 1010	Foundations of Sonography	4
DMSO 1020	Sectional Anatomy and Normal Sonographic Appearance	5
DMSO 1030	Introduction to DMSO Clinical	1
DMSO 1040	Sonographic Physics and Instrumentation	4
DMSO 1050	Abdominal Sonography I	4
DMSO 1060	Clinical Sonography I	6
		2
DMSO 1070	Pelvic Sonography and First Trimester Obstetrics	3
DMSO 1070 DMSO 1080	Pelvic Sonography and First Trimester Obstetrics Sonographic Physics and Instrumentation Registry Review	v 1
		v 1 2
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	v 1 2 6
DMSO 1080 DMSO 1090	Sonographic Physics and Instrumentation Registry Review Introduction to Vascular Sonography	v 1 2 6
DMSO 1080 DMSO 1090 DMSO 1100	Sonographic Physics and Instrumentation Registry Review Introduction to Vascular Sonography Clinical Sonography II	v 1 2

# DIAGNOSTIC MEDICAL SONOGRAPHY (CONT.)

Occupational Curriculum Cont.		<b>Credit Hours</b>
DMSO 2030	Clinical Sonography III	8
DMSO 2040	Comprehensive ABD and OB/GYN Registry Review	2
DMSO 2050	Clinical Sonography IV	11
ECHO 1550	Professional Development	1

**Total Credit Hours: 99 Minimum Credit Hours for Graduation** 

## ECHOCARDIOGRAPHY (EC23) ASSOCIATE OF APPLIED SCIENCE DEGREE

## Campus Availability:

• Floyd County Campus

## **Program Description:**

The Echocardiography program is a technical program designed to prepare students for work in the allied health field as Echocardiographers. The program offers both clinical and didactic instruction. Upon completion of the Echocardiography program, the student is eligible for a national certification examination.

**Entrance Dates:** Beginning of any semester for core courses. Occupational courses start every fall semester.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (30 Credit Hours)	Credit Hours
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3 3 3 3
MATH 1127	Introduction to Statistics	3
PHYS 1110	Conceptual Physics	
PHYS 1110L	Conceptual Physics Lab	1
PSYC 1101	Introductory Psychology	3 3 3
SPCH 1101	Public Speaking	3
XXXX xxxx	Humanities/Fine Arts Elective	3
Occupationa	al Curriculum (63 Credit Hours)	<b>Credit Hours</b>
ALHS 1090	Medical Terminology for Allied Health Sciences	2
CAVT 1030	Electrophysiology and Cardiac Anatomy	4
CAVT 1080	Advanced Hemodynamics and Cardiac Physiology	4
COMP 1000	Introduction to Computers	3
DMSO 1040	Sonographic Physics and Instrumentation	4
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	
ECHO 1100	Introduction to Echocardiography	3
ECHO 1310	Echocardiography I	4
ECHO 1320	Echocardiography II	4
ECHO 1360	Introduction to Clinical Environment	1
ECHO 1370	Echocardiography Clinical II	6
ECHO 1550	Professional Development	1
ECHO 2310	Pediatric Echocardiography	4
ECHO 2360	Echocardiography Clinical III	8
EHCO 2370	Echocardiography Clinical IV	11
ECHO 2400	Comprehensive Registry Review	1
DMSO 1090	Introduction to Vascular Sonography	2
or CAVT 1100	Cardiac Catheterization Fundamentals	(3)

## Total Credit Hours: 93 Minimum Credit Hours for Graduation

## NEUROMUSCULAR THERAPIST (NT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### **Campus Availability:**

# • Floyd County Campus

# **Program Description:**

The Neuromuscular Therapy program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, and natural sciences or mathematics. In addition, the program emphasizes specialized training in areas such as Swedish massage, functional Assessment, myofascial release, postural analysis, identification of diseases and conditions, medical documentation, therapeutic stretching, NMT protocol and client care. Program graduates receive an associate of applied science degree (A.A.S.) in Neuromuscular Therapy, which qualifies them to take a certification examination and apply for licensure in Georgia.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Spring semester for occupational curriculum.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (31 Credit Hours)	<b>Credit Hours</b>
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
MATH 1111	College Algebra	3
PSYC 1101	Introductory Psychology	3 3 3 3 3 3 2 3
SPCH 1101	Public Speaking	3
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
Occupation	al Curriculum (41 Hours)	<b>Credit Hours</b>
	al Curriculum (41 Hours) Musculoskeletal Anatomy and Physiology	Credit Hours
NEUT 1000	Musculoskeletal Anatomy and Physiology	6 4 2
NEUT 1000 NEUT 1010	Musculoskeletal Anatomy and Physiology Neural Science	6 4 2 3
NEUT 1000 NEUT 1010 NEUT 1020	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist	6 4 2 3 5
NEUT 1000 NEUT 1010 NEUT 1020 NEUT 1030	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist Neuromuscular Therapy Fundamentals	6 4 2 3 5 2
NEUT 1000 NEUT 1010 NEUT 1020 NEUT 1030 NEUT 1050	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist Neuromuscular Therapy Fundamentals Technique and Theory I Clinic I Technique and Theory II	6 4 2 3 5 2 6
NEUT 1000 NEUT 1010 NEUT 1020 NEUT 1030 NEUT 1050 NEUT 1060	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist Neuromuscular Therapy Fundamentals Technique and Theory I Clinic I Technique and Theory II Adjunctive Modalities	6 4 2 3 5 2 6
NEUT 1000 NEUT 1010 NEUT 1020 NEUT 1030 NEUT 1050 NEUT 1060 NEUT 1080	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist Neuromuscular Therapy Fundamentals Technique and Theory I Clinic I Technique and Theory II	6 4 2 3 5 2 6
NEUT 1000 NEUT 1010 NEUT 1020 NEUT 1030 NEUT 1050 NEUT 1060 NEUT 1080 NEUT 1090	Musculoskeletal Anatomy and Physiology Neural Science Pathology for the Neuromuscular Therapist Neuromuscular Therapy Fundamentals Technique and Theory I Clinic I Technique and Theory II Adjunctive Modalities	6 4 2 3 5 2

NEUT 1120 Clinic II NEUT 1230 Professional Leadership for Neuromuscular Therapist

## **Total Credit Hours: 72 Minimum Credit Hours for Graduation**

2

## OCCUPATIONAL THERAPY ASSISTANT (OTA3) ASSOCIATE OF APPLIED SCIENCE DEGREE Campus Availability:

Walker County Campus

## **Program Description:**

The Occupational Therapy Assistant program is designed to train students to implement treatment procedures and plans for clients with limitations in occupational performance under the supervision of an occupational therapist per American Occupational Therapy Association standards and State Regulations. An Occupational therapy Assistant (OTA) uses a variety of everyday activities to help people achieve independence. Services are provided to individuals of all ages who have physical, developmental, emotional, and social deficits, and who, because of those deficits, need specialized assistance to lead productive and independent lives. An OTA works as a team to assist the impaired individual in returning to a satisfying life. Other OTA responsibilities include clerical duties, record keeping, and assistance with appropriate evaluation. The Occupational Therapy Assistant program meets the accreditation requirements of the AOTA and program graduates may become certified by the National Board after passing the National certification Board examination before licensure by the State. The program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Program graduates receive an Occupational Therapy Assistant Associate of Applied Science degree.

All coursework in the OTA program must be satisfactorily completed in order to graduate. Only students who have completed the required coursework and received the A.A.S degree will be eligible to sit for the National Board of Certification in Occupational Therapy (NBCOT) examination. After successful completion of this examination, the graduate will be a certified occupational therapy assistant (COTA). Most states, including Georgia, require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT certification examination. A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or obtain state licensure.

All level II fieldwork must be completed within 18 months of completion of academic preparation.

**Accreditation:** The Georgia Northwestern Technical College's OTA Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. ACOTE's telephone number c/o AOTA is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA).

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

## Occupational Therapy Assistant (OTA) Program-Specific Admission Requirements

Selection for admission to the OTA program is based on a competitive admission point system which includes consideration of all pre-requisite course grades with added points for all courses completed at Georgia Northwestern Technical College (GNTC), and the Psychological Services Bureau (PSB) Health Occupations Aptitude Test (HOAT) scores. A minimum of 30 hours of volunteer work in at least two different clinical sites and settings with registered occupational therapist (OTR) or certified occupational therapy assistant (COTA) supervision are also required. A positive recommendation must be received from the supervising OTR or COTA. Selection for entrance into the fall class will be made during the prior summer semester. An application to the OTA program (available in office 5200) must be completed and received during the final semester of completing pre-requisite courses for inclusion in that year's applicant pool for the following fall semester. Applications received after this date will not be considered. By the end of the spring semester prior to selection, the applicants must have:

1) Official admission to GNTC and have declared OTA as your major;

2) Completion of all Learning Support courses;

3) Completion of required Biology courses within the last five years;

4) Submission of the OTA student application, which includes a brief two question autobiography, for the OTA program the final semester of completing pre-requisite courses;

5) Submission of a minimum of 30 hours of volunteer work in at least two different clinical sites and settings with OTR or COTA supervision. A positive recommendation must be received from the supervising OTR or COTA;

6) Taken the Psychological Services Bureau (PSB) Health Occupations Aptitude Test (HOAT) entrance examination and scored at least 50th percentile or above in the vocational adjustment index. If after a third attempt at the entrance examination you have not achieved a score of at least 50 percent, you will need to make an appointment with your advisor to discuss alternatives;

7) Achieved a cumulative grade point average of at least 3.0 calculated for the program required pre-requisite courses completed (the highest grade will be included in the calculation if a course has been repeated);

8) Be able to meet the technical standards listed under "Essential Requirements for OTA" and "Physical and Clinical Requirements".

OTA Selection Process Students who submitted an OTA application to the Division secretary by the deadline will receive a letter notifying them of the dates, times, location, and cost of the PBS HOAT entrance exam. Should a student register for the exam and not take it on the assigned date, the cost of the exam will be forfeited. That student will not be considered for selection. When exam results are received and spring quarter grades have been posted, the selection process will be finalized using a competitive admission point system which includes consideration of all pre-requisite course grades with added points for all courses completed at GNTC, and the PSB HOAT scores. Students will be officially notified by letter that they are accepted or not accepted. Students who are not accepted will have the opportunity to be considered for the next year's class. They will have an opportunity to retest the following year if they so desire or they may keep their current scores. Students who retest must pay an additional exam fee.

Once students are selected for admission to the OTA program, they must attend a mandatory orientation session. The dates and times will be included in the acceptance letter. During the orientation, the students will receive additional information about program requirements. This will include but is not limited to: 1) American Heart Association CPR certification for the Healthcare Provider,

2) Student liability insurance,

3) Personal health history,

4) Physical assessment by a healthcare provider,

5) Record of immunizations and titers,

6) Health Stream programs,

7) OTA Program requirements,

8) National Board for Certification in Occupational Therapy (NBCOT) examination. Upon admission to the program, students must also have a mandatory background check and a mandatory annual random drug screen performed at students' expense.

## **Essential Skill Requirements**

In order to complete the OTA program at the college, students will be required to meet the essential skill requirements of the program described below:

1) Be able to read and interpret documentation;

2) Be able to follow policies and procedures required in work setting and field work setting;

3) Be aware of personal performance and identify need of supervision;

4) Be physically capable of lifting, transferring, and moving patients, equipment, etc.;

5) Demonstrate independent skills without need of constant supervision;

6) Demonstrate and maintain professional behavior;

7) Demonstrate warmth and patience to ensure trust and respect from patients, colleagues, etc.;

8) Be able to use imagination and ingenuity in adapting to meet the environmental needs of others;

9) Be flexible and willing to change as necessary to meet the environmental needs of others.

## **Physical and Clinical Requirements**

Students will be involved in field work experiences in various settings including hospitals, long term care facilities, rehabilitation centers, home health, school systems, and mental health settings. Students may be exposed to communicable diseases and incur strains due to lifting, transferring, and moving patients. Students may also be exposed to body fluids and blood. A moderate amount of strength is needed for lifting and transferring patients, as well as assisting patients with his or her treatments. The job can be tiring due to frequent stooping, kneeling, reaching, standing, sitting, and/or walking. Manual dexterity is needed for manipulation of treatment equipment. The ability to communicate and express ideas by spoken words and written expression is required. There may be added mental and physical stress in this Health Technology field.

## **Transfer Students**

Students transferring from regionally accredited colleges must meet all of Georgia Northwestern's general and OTA program-specific admission requirements. Transferring students will not be given priority over currently enrolled or returning students. In addition:

1) Transfer students must be in good standing at his or her previous institution;

2) Transfer students must submit a letter of recommendation from a professor at his or her previous institution;

3) Transfer students may be required to document proficiency or repeat occupational therapy courses taken more than three years prior to admission to the OTA program;4) Transfer students may be required to document proficiency or repeat science courses taken more than three years prior to admission to the OTA program;

5) Only courses with a grade of "C" or better will be acceptable;

6) Prior OTA coursework will be evaluated for compatibility with Georgia Northwestern OTA curriculum.

#### Retention

OTA students must maintain a cumulative GPA of 2.0 to remain in the program;
 OTA students must maintain a "C" (70 or higher) grade in each course including fieldwork in order to progress to the next semester of the OTA program;

3) OTA students must attain a 70% test average in all OTA courses;

4) OTA students must follow all policies and procedures outlined in the OTA Student Handbook;

5) OTA students must maintain CPR certification;

6) OTA students must maintain liability insurance.

## Readmission

1) Only one readmission into the OTA program is permitted;

2) After an unsuccessful OTA course, students are required to wait until that OTA course is taught again;

3) Students withdrawing or failing an OTA course and who are unable to complete the OTA course the next time the course is offered must be readmitted to the OTA Program and repeat all OTA coursework;

4) Students seeking readmission must meet all current admission requirements;

5) Classroom and fieldwork sites must be available;

6) Students must undergo a repeat drug screen during the semester of readmission;

7) Students seeking readmission must be in good standing with the college and the OTA program, i.e., no disciplinary or academic misconduct on record;

8) Students seeking readmission must notify the OTA faculty;

9) Students seeking readmission must fulfill specific requirements, including but not limited to, repeating OTA course, as directed by the OTA faculty and/or dean of Health Technologies.

## **Specific Fieldwork Requirements**

1) Submit the results of a physical examination one month prior to Level I Fieldwork, which will include immunizations, titers, TB skin test, and a dental assessment;

2) Documentation of CPR certification prior to Level I Fieldwork;

3) Documentation of Liability insurance paid through Georgia Northwestern prior to Level I Fieldwork;

4) Completion of Health Stream, JCAHO (Joint Commission on Accreditation of Hospital Organization) requirement prior to Level I Fieldwork;

5) Completion of background check as required by Georgia Northwestern prior to Level I Fieldwork;

6) Clean drug screen test results as required by Georgia Northwestern prior to Level I Fieldwork. A random drug screen may be required any time a student's behavior warrants.

Pre-Occupa	tional Curriculum (28 Credit Hours)	<b>Credit Hours</b>
ALHS 1090	Medical Terminology for Allied Health Sciences	2
or		
BUSN 2310	Anatomy and Terminology for the Medical	(3)
	Administrative Assistant	
COMP 1000	Introduction to Computers	3
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3

MATH 1111	College Algebra	3
PSYC 1101	Introductory Psychology	3
SPCH 1101	Public Speaking	3
XXXX xxxx	Humanities/Fine Arts	3

Occupation	<b>Credit Hours</b>	
PSYC 2250	Abnormal Psychology	3
SOCI 1101	Introduction to Sociology	3
OCTA 1010	Introduction to Occupational Therapy	3
OCTA 1020	Growth and Development	3
OCTA 1030	Developmental Tasks	3
OCTA 1040	Conditions in Occupational Therapy	3
OCTA 1050	Analysis of Human Movement	4
OCTA 2010	Psychosocial Dysfunction	4
OCTA 2020	Psychosocial Dysfunction Treatment Methods	3
OCTA 2040	Pediatric Issues	4
OCTA 2060	Physical Dysfunction	4
OCTA 2070	Physical Dysfunction Treatment Methods	3
OCTA 2090	Geriatric Issues	4
OCTA 2120	Occupational Therapy Trends and Issues	3
OCTA 2130	Therapeutic Adaptations	3
OCTA 2210	Level II Fieldwork A	8
OCTA 2220	Level II Fieldwork B	8

## **Total Credit Hours: 94 Minimum Credit Hours for Graduation**

\* To view General Education Core Courses refer to page 79

### PHARMACY TECHNOLOGY (PT23) ASSOCIATE OF APPLIED SCIENCE DEGREE

### Campus Availability:

### • Walker County Campus

*Special Note: This program does not participate in competitive admissions and all courses can be taken as directed by program faculty.* 

### Program Description:

The Pharmacy Technology degree is designed to provide an individual with the entry level skills required for success in a retail pharmacy or a hospital-based pharmacy department. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and replacement. Graduates are prepared to function as pharmacy technicians in positions requiring preparations of medications according to prescription under the supervision of a pharmacist.

### Entrance Date: Fall and Spring

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Admission requirements for occupational curriculum: 1) Attainment of 18 or more years of age; 2) Documentation of high school graduation or completion of GED<sup>®</sup>; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.

General Edu	cation Core Curriculum (23 Credit Hours)*	<b>Credit Hours</b>
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3
MATH 1100	Quantitative Skills and Reasoning	3
Or		(2)
MATH 1101 or	Mathematical Modeling	(3)
MATH 1111	College Algebra	(3)
XXXX xxxx	Humanities/Fine Arts Elective	
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3
XXXX xxxx	General Education Core Elective	3
Occupation	al Curriculum (40 Credit Hours)	<b>Credit Hours</b>
ALHS 1040	Introduction to Health Care	3
ALHS 1040 ALHS 1090	Medical Terminology for Allied Health Sciences	3 2
ALHS 1090 or	Medical Terminology for Allied Health Sciences	2
ALHS 1090 or BUSN 2300	Medical Terminology for Allied Health Sciences Medical Terminology	2 (2)
ALHS 1090 or BUSN 2300 COMP 1000	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers	2 (2) 3
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations	2 (2) 3 4
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals	2 (2) 3 4 3
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications	2 (2) 3 4 3 4
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation	2 (2) 3 4 3 4 4
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030 PHAR 1040	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation Pharmacology	2 (2) 3 4 3 4 4 4 4
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030 PHAR 1040 PHAR 1050	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation Pharmacology Pharmacy Technology Practicum	2 (2) 3 4 3 4 4 4 4 5
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030 PHAR 1040 PHAR 1050 PHAR 2060	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation Pharmacology Pharmacy Technology Practicum Advanced Pharmacy Technology Principles	2 (2) 3 4 3 4 4 4 4 5 3
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030 PHAR 1040 PHAR 1050 PHAR 2060 PHAR 2070	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation Pharmacology Pharmacy Technology Practicum Advanced Pharmacy Technology Principles Advanced Pharmacy Technology Practicum	2 (2) 3 4 3 4 4 4 4 5
ALHS 1090 or BUSN 2300 COMP 1000 PHAR 1000 PHAR 1010 PHAR 1020 PHAR 1030 PHAR 1030 PHAR 1050 PHAR 2060 PHAR 2070 <b>Total Credit I</b>	Medical Terminology for Allied Health Sciences Medical Terminology Introduction to Computers Pharmaceutical Calculations Pharmacy Technology Fundamentals Principles of Dispensing Medications Principles of Sterile Medication Preparation Pharmacology Pharmacy Technology Practicum Advanced Pharmacy Technology Principles	2 (2) 3 4 3 4 4 4 4 5 3

### RADIATION THERAPY (RT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### Campus Availability:

• Floyd County Campus

### **Program Description:**

The Radiation Therapy program is a technical program that provides the knowledge and skills to qualify participants as radiation therapists. Upon completion of the Radiation Therapy program, the student is eligible to apply for a national certification examination thus enabling him or her to achieve professional employment in the field.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Summer semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (31 Credit Hours)*	<b>Credit Hours</b>
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3 3 3 3
PSYC 1101	Introductory Psychology	3
SPCH 1101	Public Speaking	3
XXXX xxxx	Humanities/Fine Arts Elective	3
COMP 1000	Introduction to Computers	3
	al Curriculum I (19 Credit Hours)	<b>Credit Hours</b>
-	en only if not a Registered Radiologic Technologist)	
RADT 1010	Introduction to Radiology	4
RADT 1070		6
RADT 1160		6
RADT 1200	Principles of Radiation Biology and Protection	3
-	al Curriculum II (54 Credit Hours)	<b>Credit Hours</b>
RDNT 1050	Simulator Applications	3
RDNT 1520	Introduction to Radiation Therapy	3
RDNT 1540	Radiation Therapy Physics	3
RDNT 1560	Radiation Therapy - Cross / Sectional Anatomy	3
RDNT 1580	Oncology I	3
RDNT 1600	Pathology	4
RDNT 1610	Introduction to Clinical	2
RDNT 1620	Radiation Therapy Clinical I - Clinical Rotation	5
RDNT 1640	Quality Management	3
RDNT 1660	Treatment Planning	3
RDNT 1680	Oncology II	3
RDNT 1720	Radiation Therapy Clinical II - Clinical Rotation	5 3 3
RDNT 1740	Research Methods	3
RDNT 2760	Advanced Radiation Techniques	3
RDNT 2820	Radiation Therapy Clinical III - Clinical Rotation	5
RDNT 2860	Concepts Integration and Review	3
Total Credit I	Hours: 104 Minimum Credit Hours for Graduation (85 if a	Iready an RRT)

### RADIOLOGIC TECHNOLOGY (RT23) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Radiologic Technology associate degree program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive an associate of applied science degree, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Summer semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (28 Credit Hours)	<b>Credit Hours</b>
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	1 3 3
MATH 1101	Mathematical Modeling	3
or		(-)
MATH 1111	College Algebra	(3)
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3 2
XXXX xxxx	General Education Core Elective	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
Occupation	al Curriculum (65 Credit Hours)	<b>Credit Hours</b>
RADT 1010	Introduction to Radiology	4
RADT 1030	Radiographic Procedures I	
RADT 1030 RADT 1060	Radiographic Procedures I Radiographic Procedures II	3 3
RADT 1030 RADT 1060 RADT 1070	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I	3 3 6
RADT 1030 RADT 1060 RADT 1070 RADT 1160	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II	3 3 6 6
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection	3 3 6 6 3
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection Clinical Radiography I	3 3 6 6 3 4
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II	3 3 6 6 3 4 7
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III	3 3 6 3 4 7 2
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090 RADT 2190	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III Radiographic Pathology	3 6 6 3 4 7 2 2
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090 RADT 2190 RADT 2260	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III Radiographic Pathology Radiologic Technology Review	3 6 6 3 4 7 2 2 3
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090 RADT 2190 RADT 2260 RADT 2340	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III Radiographic Pathology Radiologic Technology Review Clinical Radiography III	3 3 6 3 4 7 2 2 2 3 6
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090 RADT 2190 RADT 2260 RADT 2340 RADT 2350	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Imaging II Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III Radiographic Pathology Radiologic Technology Review Clinical Radiography III Clinical Radiography IV	3 3 6 3 4 7 2 2 3 6 7
RADT 1030 RADT 1060 RADT 1070 RADT 1160 RADT 1200 RADT 1320 RADT 1330 RADT 2090 RADT 2190 RADT 2260 RADT 2340	Radiographic Procedures I Radiographic Procedures II Principles of Imaging I Principles of Radiation Biology and Protection Clinical Radiography I Clinical Radiography II Radiographic Procedures III Radiographic Pathology Radiologic Technology Review Clinical Radiography III	3 3 6 3 4 7 2 2 2 3 6

**Total Credit Hours: 93 Minimum Credit Hours for Graduation** 

### RESPIRATORY CARE (RCT3) ASSOCIATE OF APPLIED SCIENCE DEGREE

### Campus Availability:

• Floyd County Campus

### Program Description:

The Respiratory Care program is a sequence of courses that prepares students for careers in the field of Respiratory Care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a Respiratory Care Associate Degree which gualifies them to apply to take the examinations to become a Registered Respiratory Therapist. Students may become certified by taking the Entry Level Certification examination administered by the National Board for Respiratory Care. Upon successful completion of the Certification (CRT) Exam, the graduate is eligible to apply to take both parts of the Registry (RRT) Exams. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license is to pass at least the Entry Level Certification Exam.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Spring semester for occupational curriculum.

### **Entrance Requirements:**

Age: 17 years	old for entrai	nce into Health	Technology	pre-occupational	curriculum
18 years	old for entrand	ce into Health T	echnology pi	rograms	

Pre-Occupat	tional Curriculum (32 Credit Hours)	Credit Hours
ALHS 1127	Health Sciences Chemistry	4
or		
CHEM 1211	Chemistry I	(3)
+		
CHEM 1211L	Chemistry Lab I	(1)
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1
ENGL 1101	Composition and Rhetoric	3
MATH 1101	Mathematical Modeling	3
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	Humanities/Fine Arts Elective	3 3
XXXX xxxx	Social/Behavioral Sciences Elective	3

(Program requirements continued on following page)

### **RESPIRATORY CARE (CONT.)**

Occupation	al Curriculum (57 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
RESP 1110	Pharmacology	3
RESP 1120	Introduction to Respiratory Therapy	3
RESP 1130	Respiratory Therapy Lab I	4
RESP 1193	Cardiopulmonary Anatomy and Physiology	7
RESP 2090	Clinical Practices I	2
RESP 2100	Clinical Practices II	2
RESP 2110	Pulmonary Disease	3
RESP 2120	Critical Respiratory Care	3
RESP 2130	Mechanical Ventilation and Airway management	4
RESP 2140	Advanced Critical Care Monitoring	1
RESP 2150	Pulmonary Function Testing	1
RESP 2160	Neonatal Pediatric Respiratory Care	3
RESP 2170	Advanced Respiratory Care Seminar	3
RESP 2180	Clinical Practice III	2
RESP 2190	Clinical Practice IV	2
RESP 2200	Clinical Practice V	3
RESP 2220	Clinical Practice VI	7
RESP 2270	Rehabilitation and Home Care	1

**Total Credit Hours: 89 Minimum Credit Hours for Graduation** 

### VASCULAR TECHNOLOGY (VT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

### • Floyd County Campus

### **Program Description:**

The Vascular Technology associate degree program is a sequence of courses that provide educational opportunities to individuals in didactic and clinical environments that will enable them to obtain skills, knowledge and attitudes necessary to graduate and become successful entry-level Vascular Technologist in an allied health profession specifically concerning the diagnosis and treatment of patients with vascular diseases. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. A vascular technologist performs examinations at the request or under direct supervision of a physician, is proficient in the use of a variety of diagnostic imaging and monitoring equipment, and provides sonographic images and data from which a correct anatomic and physiologic diagnosis can be made. Vascular technologist use high frequency sound waves to perform venous and arterial diagnostic procedures. The information is evaluated by physicians to make a medical diagnosis. Course work includes sonographic physics, sonographic identification of normal and abnormal anatomy, physiology, pathology, and pathophysiology of the venous and arterial systems, journal and case reviews, and a comprehensive registry review.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (30 Credit Hours)	<b>Credit Hours</b>
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1127	Introduction to Statistics	3
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
PSYC 1101	Introductory Psychology	3
SPCH 1101	Public Speaking	3
XXXX xxxx	Humanities/Fine Arts Elective	3
Occupation	al Curriculum (63 Credit Hours)	Credit Hours
ALHS 1090	Medical Terminology for Allied Health Sciences	2
CAVT 1100	Cardiac Catheterization Fundamentals	3
COMP 1000	Introduction to Computers	3
DMSO 1020	Sectional Anatomy and Normal Sonographic Appearance	5
DMSO 1040	Sonographic Physics and Instrumentation	4
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	v 1
ECHO 1550	Professional Development	1
VAST 2030	Essentials of Echocardiography	2

(Program requirements continued on following page)

### VASCULAR TECHNOLOGY (CONT.)

Occupation	al Curriculum (63 Credit Hours CONT.)	<b>Credit Hours</b>
VAST 1050	Clinic I Introduction to the Clinical Environment	1
VAST 1040	Vascular I	4
VAST 1100	Vascular Fundamentals	3
VAST 2050	Vascular II	4
VAST 2060	Vascular Clinical II	6
VAST 2070	Vascular III	4
VAST 2080	Vascular Clinical III	8
VAST 2090	Vascular Clinical IV Externship	11
VAST 2100	Advanced Vascular Technology Registry Review	1

### Total Credit Hours: 93 Minimum Credit Hours for Graduation

### DENTAL ASSISTING (DA12) DIPLOMA

### **Campus Availability:**

- Gordon County Campus
- Polk County Campus

### **Program Description:**

The Dental Assisting accredited program prepares students for employment in a variety of positions in today's dental offices. The Dental Assisting program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of dental assisting. Graduates of the program receive a Dental Assisting Diploma and are eligible to sit for a national certification examination.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Winter semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Program graduates are eligible to apply to sit for the Dental Assisting National Board.

Pre-Occupation	tional Curriculum (20 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
MATH 1012	Foundations of Mathematics	3
ALHS 1040	Introduction to Health Care	3
ALHS 1011	Anatomy and Physiology	5
COMP 1000	Introduction to Computers	3
<b>Occupationa</b>	al Curriculum (40 Hours)	Credit Hours
DENA 1030	Preventive Dentistry	2
DENA 1050	Microbiology and Infection Control	2
DENA 1070	Oral Pathology and Therapeutics	2
DENA 1080	Dental Biology	5
DENA 1090	Dental Assisting National Board Examination Preparation	
DENA 1340	Dental Assisting I: General Chairside	6
DENA 1350	Dental Assisting II: Dental Specialties and EFDA Skills	7
DENA 1390	Dental Radiology	4
DENA 1400	Dental Practice Management	3
DENA 1460	Dental Practicum I	1
	Dental Practicum II	1
DENA 1480	Dental Practicum III	5

### **Total Credit Hours: 60 Minimum Credit Hours for Graduation**

### DIAGNOSTIC MEDICAL SONOGRAPHY (DMS4) DIPLOMA

### (Not Accepting New Students Into This Program)

### **Campus Availability:**

• Floyd County Campus

### Program Description:

The Diagnostic Medical Sonography Diploma program is a sequence of courses that provides educational opportunities to individuals in didactic and clinical environments that will enable them to gain skills, knowledge and attitudes necessary to graduate and become successful entry-level employees in the field of Diagnostic Medical Sonography. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. Sonographers use high frequency sound waves to produce dynamic visual pictures of internal body structures. The images are evaluated by physicians to make a medical diagnosis. Course work includes sonographers use high frequency sound waves to produce dynamic visual pictures of internal body structures. The images are evaluated by physicians to make a medical diagnosis. Course work includes sonographic physics, sonographic identification of normal and abnormal anatomy, physiology, pathology, and pathophysiology of the abdomen, pelvis, and small parts of the adult, pediatric, and fetal patient, clinical application courses, interventional sonography, journal and case study review, and comprehensive registry reviews.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

**Education:** Graduation from programmatically accredited medical program, at least one year in length or bachelor's degree, and completion of required pre-occupational curriculum.

Pre-Occupa	tional Curriculum (20 Credit Hours)	<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)
MATH 1013	Algebraic Concepts	3
MATH 1127	Introduction to Statistics	3
Occupationa	al Curriculum (68 Credit Hours)	Credit Hours
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
DMSO 1010	Foundations of Sonography	4
DMSO 1020	Sectional Anatomy and Normal Sonographic Appearance	5
DMSO 1030	Introduction to DMSO Clinical	1
DMSO 1040	Sonographic Physics and Instrumentation	4
DMSO 1050	Abdominal Sonography I	4
DMSO 1060	Clinical Sonography I	6
DMSO 1070	Pelvic Sonography and First Trimester Obstetrics	3
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	v 1
DMSO 1090	Introduction to Vascular Sonography	2
DMSO 1100	Clinical Sonography II	6

### DIAGNOSTIC MEDICAL SONOGRAPHY (CONT.)

Pre-Occupational Curriculum (69 Credit Hours)		<b>Credit Hours</b>
DMSO 2010	OB Second and Third Trimesters	3
DMSO 2020	Specialized Sonographic Procedures	3
DMSO 2030	Clinical Sonography III	8
DMSO 2040	Comprehensive ABD and OB/GYN Registry Review	2
	Clinical Sonography IV	11
ECHO 1550	Professional Development	1

Total Credit Hours: 89 Minimum Credit Hours for Graduation

### ECHOCARDIOGRAPHY (EC14) DIPLOMA

### (Not Accepting New Students Into This Program)

### **Campus Availability:**

• Floyd County Campus

### Program Description:

The Echocardiography program is a technical program designed to prepare students for work in the allied health field as Echocardiographers. The program offers both clinical and didactic instruction. Upon completion of the Echocardiography program, the student is eligible for a national certification examination.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

#### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

**Education:** Graduation from programmatically accredited medical program, at least one year in length or bachelor's degree, and completion of required pre-occupational curriculum.

Pre-Occupa	tional Curriculum (21 Credit Hours)	Credit Hours
ALHS 1011	Anatomy and Physiology	5
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	3 1 3 3 3 3
ENGL 1010	Fundamentals of English I	3
MATH 1013	Algebraic Concepts	3
MATH 1127	Introduction to Statistics	3
PSYC 1010	Basic Psychology	3
Occupation	al Curriculum (66 Credit Hours)	<b>Credit Hours</b>
ALHS 1090	Medical Terminology for Allied Health Sciences	2
CAVT 1030	Electrophysiology and Cardiac Anatomy	4
CAVT 1080	Advanced Hemodynamics and Cardiac Physiology	4
COMP 1000	Introduction to Computers	3
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	v 1
DMSO 1040	Sonographic Physics and Instrumentation	4
ECHO 1100	Introduction to Echocardiography	3
ECHO 1310	Echocardiography I	4
ECHO 1320	Echocardiography II	4
ECHO 1360	Introduction to Clinical Environment	1
ECHO 1370	Echocardiography Clinical II	6
ECHO 1550	Professional Development	1
ECHO 2310	Pediatric Echocardiography	4
ECHO 2360	Echocardiography Clinical III	8
ECHO 2370	Echocardiography Clinical IV	11
ECHO 2400	Comprehensive Registry Review	1
DMSO 1090 or	Introduction to Vascular Sonography	2
CAVT 1100	Cardiac Catheterization Fundamentals	(3)

**Total Credit Hours: 87 Minimum Credit Hours for Graduation** 

### NEUROMUSCULAR THERAPIST (NT12) DIPLOMA

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Neuromuscular Therapist program consists of a sequence of courses that prepares students for careers in the field of Neuromuscular Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Curriculum fundamentals, Swedish massage, musculoskeletal anatomy, identification of diseases and conditions, medical documentation, and client care prepare the graduate for an entry level position. Specialized training in nervous system pathology, postural analysis, neuromuscular therapy, muscle energy techniques, myofascial release and clinical reasoning establish this program and its graduates as specialists in their field. Program graduates receive a Neuromuscular Therapy diploma, which qualifies them to take the National Certification Examination for Therapeutic Massage (NCETM) offered by the National Certification Board of Therapeutic Massage (NCBTMB) or and apply for Georgia licensure.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Spring semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupa	tional Curriculum (22 Credit Hours)	<b>Credit Hours</b>	
ENGL 1010	Fundamentals of English I	3	
PSYC 1010	1 51	3	
MATH 1011	Business Math	3	
or			
MATH 1012		(3)	
ALHS 1011	Anatomy and Physiology	5	
ALHS 1090	Medical Terminology for Allied Health Sciences	2	
COMP 1000		3	
ALHS 1040	Introduction to Health Care	3	
<b>Occupation</b>	al Curriculum (41 Credit Hours)	<b>Credit Hours</b>	
NEUT 1000	Musculoskeletal Anatomy and Physiology	6	
NEUT 1010	Neural Science	4	
NEUT 1020	Pathology for the Neuromuscular Therapist	2	
NEUT 1030	Neuromuscular Therapy Fundamentals	3	
NEUT 1050	Technique and Theory I	5	
NEUT 1060	Clinic I	2	
NEUT 1080	Technique and Theory II	6	
NEUT 1090	Adjunctive Modalities	2	
NEUT 1100	Progressive Modalities	3	
NEUT 1110	Licensure Review	3	
NEUT 1120		3	
NEUT 1230	Professional Leadership for Neuromuscular Therapist	2	

### **Total Credit Hours: 63 Minimum Credit Hours for Graduation**

### PHARMACY TECHNOLOGY (PT22) DIPLOMA

### **Campus Availability:**

• Walker County Campus Special note: This program does not participate in competitive admissions and all courses can be taken as directed by program faculty.

### **Program Description:**

The Pharmacy Technology Diploma is designed to enable the student to acquire the knowledge, skills and attitudes for employment within a pharmacy. Program graduates will be able to perform a variety of technical duties related to preparing and dispensing drugs in accordance with standard procedures and laws under the supervision of a registered pharmacist. A variety of clinical experiences is designed to integrate theory and practice. Graduates will be employable as an entry level pharmacy technician.

### Entrance Date: Fall and Spring

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Admission requirements for occupational curriculum: 1) Attainment of 18 or more years of age; 2) Documentation of high school graduation or completion of GED<sup>®</sup>; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.

General Cor	e Curriculum (9 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
Occupation	al Curriculum (45 Credit Hours)	<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
or		
BUSN 2300	Medical Terminology	(2)
COMP 1000	Introduction to Computers	3
PHAR 1000	Pharmaceutical Calculations	4
PHAR 1010	Pharmacy Technology Fundamentals	3
PHAR 1020	Principles of Dispensing Medications	4
PHAR 1030	Principles of Sterile Medication Preparation	4
PHAR 1040	Pharmacology	4
PHAR 1050	Pharmacy Technology Practicum	5
PHAR 2060	Advanced Pharmacy Technology Principles	3
PHAR 2070	Advanced Pharmacy Technology Practicum	5

### **Total Credit Hours: 54 Minimum Credit Hours for Graduation**

### RADIATION THERAPY (RT14) DIPLOMA

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Radiation Therapy program is a technical program that provides the knowledge and skills to qualify participants as radiation therapists. Upon completion of the Radiation Therapy program, the student is eligible for a national certification examination thus enabling him or her to achieve professional employment in the field.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

### Student must already be a Registered Radiologic Technologist (RRT)

Pre-Occupa	tional Curriculum (22 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
MATH 1013	Algebraic Concepts	3
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health	2
ALHS 1011	Anatomy and Physiology	5
COMP 1000	Introduction to Computers	3
Occupation	al Curriculum (54 Credit Hours)	<b>Credit Hours</b>
RDNT 1050	Simulator Applications	3
RDNT 1520	Introduction to Radiation Therapy	3
RDNT 1540	Radiation Therapy Physics	3
RDNT 1560	Radiation Therapy - Cross / Sectional Anatomy	3
RDNT 1580	Oncology I	3
RDNT 1600	Pathology	4
RDNT 1610	Introduction to Clinical	2
RDNT 1620	Radiation Therapy Clinical I - Clinical Rotation	5
RDNT 1640	Quality Management	3
RDNT 1660	Treatment Planning	3
RDNT 1680	Oncology II	3
RDNT 1720	Radiation Therapy Clinical II - Clinical Rotation	5
RDNT 1740	Research Methods	3
RDNT 2760	Advanced Radiation Techniques	3
RDNT 2820	Radiation Therapy Clinical III - Clinical Rotation	5
RDNT 2860	Concepts Integration and Review	3

### **Total Credit Hours: 76 Minimum Credit Hours for Graduation**

### RADIOLOGIC TECHNOLOGY (RT24) DIPLOMA

### (Not Accepting New Students Into This Program)

### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

The Radiologic Technology diploma program is a sequence of courses that prepares students for positions in radiology departments and related businesses and industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Program graduates receive a diploma, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum

### **Entrance Requirements:**

**Age:**17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Applicants must be a Registered Radiologic Technologist in order to qualify for the diploma program. All other students must satisfy the entrance requirements for the Associate degree Radiation Therapy program.

Pre-Occupational Curriculum (18 Credit Hours) ENGL 1010 Fundamentals of English I	
Fundamentals of English I	3
Interpersonal Relations and Professional Development	2
	(3)
	(3) 3 5
	5
	2 3
Introduction to Computers	3
al Curriculum (65 Credit Hours)	<b>Credit Hours</b>
Introduction to Radiology	4
Radiographic Procedures I	3
Radiographic Procedures II	3 3
	6
	6
	3
	4
	7
	2 2 3
	2
	3
	6 7
	/ 9
	9
	Fundamentals of English I Interpersonal Relations and Professional Development Basic Psychology Algebraic Concepts Anatomy and Physiology Medical Terminology for Allied Health Sciences Introduction to Computers <b>al Curriculum (65 Credit Hours)</b> Introduction to Radiology Radiographic Procedures I

### **Total Credit Hours: 83 Minimum Credit Hours for Graduation**

### VASCULAR TECHNOLOGY (VT14) DIPLOMA

### (Not Accepting New Students Into This Program)

### **Campus Availability:**

• Floyd County Campus

### Program Description:

The Vascular Technology program is a sequence of courses that provide educational opportunities to individuals in didactic and clinical environments that will enable them to obtain skills, knowledge and attitudes necessary to graduate and become successful entry-level Vascular Technologist in an allied health profession specifically concerning the diagnosis and treatment of patients with vascular diseases. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. A vascular technologist performs examinations at the request or under direct supervision of a physician, is proficient in the use of a variety of diagnostic imaging and monitoring equipment, and provides sonographic images and data from which a correct anatomic and physiologic diagnosis can be made. Vascular Technology use high frequency sound waves to perform venous and arterial diagnostic procedures. The information is evaluated by physicians to make a medical diagnosis. Course work includes sonographic physics, sonographic identification of normal and abnormal anatomy, physiology, pathology, and pathophysiology of the venous and arterial systems, journal and case reviews, and a comprehensive registry review.

### Entrance Dates: Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

**Education:** Graduation from programmatically accredited medical program at least one year in length or bachelor's degree and completion of required pre-occupational curriculum.

Pre-Occupational Curriculum (20 Credit Hours)		Credit Hours		
ALHS 1011	Anatomy and Physiology	5		
PHYS 1110	Conceptual Physics	3		
PHYS 1110L	Conceptual Physics Lab	1		
ENGL 1010	Fundamentals of English I	3		
EMPL 1000	Interpersonal Relations and Professional Development	2		
or				
PSYC 1010	Basic Psychology	(3)		
MATH 1013	Algebraic Concepts	3		
MATH 1127	Introduction to Statistics	3		
Occupationa	al Curriculum (67 Credit Hours)	<b>Credit Hours</b>		
ALHS 1090	Medical Terminology for Allied Health Sciences	2		
COMP 1000	Introduction to Computers	3		
CAVT 1100	Cardiac Catheterization Fundamentals	3		
CAVT 1030	Electrophysiology and Cardiac Anatomy	4		
DMSO 1020	Sectional Anatomy and Normal Sonographic Appearance	5		
DMSO 1040	Sonographic Physics and Instrumentation	4		
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	v 1		
(Program requirements continued on following page)				

### VASCULAR TECHNOLOGY (CONT.)

#### **Occupational Curriculum (CONT.) Credit Hours** ECHO 1550 Professional Development 1 VAST 1040 Vascular I 4 VAST 1050 Clinic I - Introduction to the Clinical Environment 1 VAST 1100 Vascular Fundamentals 3 VAST 2050 Vascular II 4 VAST 2060 Vascular Clinical II 6 VAST 2030 Essentials of Echocardiography 2 VAST 2070 Vascular III 4 VAST 2080 Vascular Clinical III 8 VAST 2090 Vascular Clinical IV - Externship 11 VAST 2100 Advance Vascular Technology Registry Review 1

### **Total Credit Hours: 87 Minimum Credit Hours for Graduation**

### HEALTH CARE ASSISTANT (HA21) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

(Note: Some classes may only be available on the Floyd, Gordon, and Walker County Campuses)

### **Program Description:**

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

Pre-Occupational Curriculum (22 credit hours)		Credit Hours
ALHS 1011	Anatomy and Physiology	5
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
or		
MATH 1013	Algebraic Concepts	(3)
PSYC 1010	Basic Psychology	3

# And completion of ONE of the following sets of occupational curriculum for a specialization:

Certified Nu	Irsing Assistant Speciality (14 Credit Hours)	<b>Credit Hours</b>
NAST 1100	Nurse Aide Fundamentals	6
ALHS 1060	Diet and Nutrition for Allied Sciences	2
XXXX xxxx	Occupationally related electives	6
	(See advisor for recommended list)	
Phlebotomy	/ Specialty (14 Credit Hours)	<b>Credit Hours</b>
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
XXXX xxxx	Occupational Related Electives	6
	(See advisor for recommended list)	

(Program requirements continued on the following page)

### HEALTH CARE ASSISTANT(CONT.)

Office Specialty (14 Credit Hours)		<b>Credit Hours</b>
BUSN 1440	Document Production	4
BUSN 1240	Office Procedures	3
BUSN 2340	Medical Administrative Procedures	4
XXXX xxxx	Occupational Related Elective	3
	(See advisor for recommended list)	
	<b>ling Specialty (14 Credit Hours)</b> cy Campus Only)	Credit Hours
		<u>Credit Hours</u> 4
(Floyd Count	y Campus Only)	
(Floyd Count BUSN 1440	y Campus Only) Document Production	4
(Floyd Count BUSN 1440 MAST 1120	y Campus Only) Document Production Human Pathological Conditions in the Medical Office	4 3

Total Credit Hours: 36 Minimum Credit Hours for Graduation

### HEALTH CARE SCIENCE (HS21) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

(Note: Some classes may only be available on the Floyd and Walker County Campuses)

### **Program Description:**

The Health Care Science Certificate of Credit is a program that provides academic foundations at the degree level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

	tional Curriculum (12 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
PSYC 1101	1 1 51	3
XXXX xxxx	Humanities/Fine Arts	3
MATH xxxx	See Program Specific Requirements	3
<u>General Cor</u>	<u>e Science (12 Credit Hours)</u>	<u>Credit Hours</u>
XXXX xxxx	See Program Specific Requirements	12
General Oco	cupational Courses (5 Credit Hours)	<u>Credit Hours</u>
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
	ation of ONE of the following sets of occupational cu on (8 Credit Hours):	rriculum for a
specializati		rriculum for a Credit Hours
specializati	on (8 Credit Hours): Irsing Assistant Speciality	
specialization Certified Nu NAST 1100	on (8 Credit Hours): Irsing Assistant Speciality	Credit Hours
specialization Certified Nu NAST 1100	on (8 Credit Hours): Irsing Assistant Speciality Nurse Aide Fundamentals Diet and Nutrition for Allied Sciences	Credit Hours
<b>specializati</b> <b>Certified Nu</b> NAST 1100 ALHS 1060	on (8 Credit Hours): Irsing Assistant Speciality Nurse Aide Fundamentals Diet and Nutrition for Allied Sciences V Specialty	Credit Hours 6 2 Credit Hours 3
specialization Certified Nu NAST 1100 ALHS 1060 Phlebotomy	on (8 Credit Hours): Irsing Assistant Speciality Nurse Aide Fundamentals Diet and Nutrition for Allied Sciences Y Specialty Introduction to Venipuncture	Credit Hours 6 2 Credit Hours

Total Credit Hours: 37 Minimum Credit Hours for Graduation

### MAMMOGRAPHY (MA11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Mammography certificate program prepares students to sit for the national certification examination in mammography offered by the American Registry of Radiologic Technologists (ARRT). The program meets MQSA initial education requirements for mammographers and continuing education. This program leads to a technical certificate and can usually be completed in one semester.

Entrance Date: Beginning of any semester (Offered online)

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

**Education:** Open to anyone who is registered with the ARRT as a radiographer (RRT).

### **Required Courses**

RADT 2520

ursesCredit HoursMammographic Anatomy, Physics and Positioning6

6

RADT 2530 Clinical Mammography

### **Total Credit Hours: 12 Minimum Credit Hours for Graduation**

### PHARMACY ASSISTANT (PB71) CERTIFICATE

### **Campus Availability:**

Walker County Campus

### **Program Description:**

The Pharmacy Assistant Technical Certificate of Credit (TCC) is designed to provide students with short term training to prepare them for entry-level employment in a variety of settings such as hospitals, retail pharmacies, nursing homes, medical clinics, etc. Students will receive didactic instruction and laboratory training in anatomy and physiology, fundamental concepts and principles of receiving, storing and dispensing medication.

Entrance Date: Fall, Spring semesters (Day); Winter semester (Evening)

### **Entrance Requirements:**

Age: 17 years old for entrance into Health Technology pre-occupational curriculum, 18 years old for entrance into Health Technology programs

Admission requirements for occupational curriculum: 1) Attainment of 18 or more years of age; 2) Documentation of high school graduation or completion of GED<sup>®</sup>; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.

### **Other Requirements:**

1. Submit results of a TB skin test or chest X-ray and the results of a drug screen one month prior to practicum courses (fieldwork);

2. Documentation of CPR certification through the American Heart Association submitted prior to practicum coursework (fieldwork);

3. Liability Insurance paid through GNTC prior to practicum coursework (fieldwork);

4. Background check that will be completed before admittance into practicum coursework (fieldwork).

Occupational Curriculum		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
MATH 1012	Foundations of Mathematics	3
PHAR 1000	Pharmaceutical Calculations	4
PHAR 1010	Pharmacy Technology Fundamentals	3
PHAR 1020	Principles of Dispensing Medications	4
PHAR 1040	Pharmacology	4
PHAR 1055	Pharmacy Assistant Practicum	5

### Total Credit Hours: 33 Minimum Credit Hours for Graduation

### PHLEBOTOMY TECHNICIAN (PT21) CERTIFICATE

### **Campus Availability:**

• Walker County Campus

#### **Program Description:**

The Phlebotomy Technician program trains students to draw and process blood specimens. Phlebotomy technicians typically work in concert with medical lab technicians in hospitals or other healthcare organizations. Topics covered include human anatomy, anatomical terminology, venipuncture, and clinical practice.

### Entrance Date: Winter Semester

### **Entrance Requirements:**

**Age:** 17 years old for entrance into Health Technology pre-occupational curriculum 18 years old for entrance into Health Technology programs

**Note:** Students will be required to purchase mandatory uniform and minimal supplies for the Phlebotomy program, along with completing a CPR course. Students entering the Phlebotomy program are required to complete a standardized physical examination, drug screen, background check, Health Program Orientation and pay liability insurance prior to having physical contact with patients. Each student will be given a physical form from the instructor of PHLT 1030 course. PHLT 1050 may require some clinical hours during the daytime.

Required Courses		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1090	Medical Terminology for Allied Health Sciences	2
ALHS 1040	Introduction to Health Care	3
COMP 1000	Introduction to Computers	3
ENGL 1010	Fundamentals of English I	3
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5

### **Total Credit Hours: 24 Minimum Credit Hours for Graduation**

## **Nursing and Allied Health Technologies**

The following associate degree, diploma, and certificate programs are located in The Nursing and Allied Health Technologies Division. All programs are not offered on every campus. As with all GNTC programs, students interested in Nursing and Allied Health Technologies programs should consult specific program information in this catalog to see where the program is offered and visit or call the Student Success Center to discuss program admission requirements and entry dates. The following is a list of the Nursing and Allied Health Technologies degrees, diplomas, and certificates that GNTC offers. The letters following the program names identify the campuses where the programs are taught. (F-Floyd County Campus, G-Gordon County Campus, P-Polk County Campus, and W-Walker County Campus).

### Associate of Science in Nursing Degree Programs

Nursing (NU33) - W Nursing LPN to ASN Transition Program (NLT3) - W

### Associate of Applied Science Degree Programs

Medical Assisting (MA23) - W Paramedicine (PT13) - F Surgical Technology (ST13) - W

### Diploma Programs

EMS Professions (EP12) - F Medical Assisting (MA22) - F, W Paramedicine (PT12) - F Practical Nursing (PN12) - F, W Practical Nursing (PN14) - F, W *Not Accepting New Students Into This Program* Surgical Technology (ST12) - W

### **Certificate Programs**

Advanced Emergency Medical Technician (AEMT) (EMH1) - F, G, W Central Sterile Supply Processing Technician- Adv (CS91) - W Emergency Medical Responder (EMR) (EB71) - F, G, W Emergency Medical Technician (EMT) (EMJ1) - F, G, W Health Care Assistant (HA21) - F, G, P, W Health Care Science (HS21) - F, G, P, W Patient Care Assistant (PC21) - F, G, W

Program lengths vary from three months to two years. While most pre-occupational curriculum are available during the day and evening on GNTC's four campuses, most occupational curriculum are held during the day on the Floyd County and Walker County Campuses.

### **Enrollment Procedures and Information for Nursing and Allied Health Technologies at Georgia Northwestern Technical College**

### I. Admission Procedures

- A. Refer to the Admissions Procedures outlined in the Admissions Policy and complete all requirements.
- B. Complete all requirements for entry in the nursing and allied health technologies program of choice. Nursing and allied health technologies programs each have additional entrance requirements or pre-occupational curriculum that should be taken prior to taking occupational curriculum or receiving official acceptance to the program. Advisors will discuss these requirements with their students. Specific requirements are listed under the program descriptions. When a student is in the final semester of completing courses, he/she will complete a form in the Office of Student Affairs requesting a review of course work at the end of that semester. This form will be available to students during the third week of the semester. An announcement will be made to students regarding this process.
- C.All students who complete their pre-occupational curriculum with a C'' or better, apply for addition to the Nursing and Allied Health Technologies programs eligibility pool, and have attended the mandatory Nursing and Allied Health programs orientation will be added to the Nursing and Allied Health Technologies programs eligibility pool. If a student has not satisfactorily completed the pre-occupational curriculum (example: did not earn a grade of "C" or higher in any required preoccupational course or did not attend the mandatory Nursing and Allied Health Technologies programs orientation), the student's name will not be placed in the Nursing and Allied Health Technologies programs eligibility pool for their program of choice. Once the student's transcript has been reviewed, and it is determined that all requirements have been met for placement in the Nursing and Allied Health Programs Eligibility Pool, students will be notified to contact the Nursing and AlliedHealth Technologies administrative assistants to take the appropriate entrance exam for their program of choice. Once that is completed, each student's total score will be calculated and he/she will be entered into the Nursing and Allied Health Technologies programs eligibility pool. During the semester, before the program selected will be admitting students, the Nursing and Allied Health Technologies administration staff will use the competitive admissions policies and procedures for each individual program to select those most gualified for entry into the program. All students in the eligibility pool will be notified of their status and advised of their options.
- D. Upon completion of all items above, students will receive official notification of acceptance and directions on how to complete enrollment into the Nursing and Allied Health Technologies program of choice. Or, the student will be notified of his/her non-selected status and invited to make an appointment with the Nursing and Allied Health Technologies administration offices to discuss their options.
- E. Steps to enter the Nursing and Allied Health program of choice. These requirements include, but are not limited to the following:
  - Return completed Medical Report Form certifying ability to meet physical and mental performance requirements. If selected by a program, a

physical examination is required before attending occupational curriculum in the Nursing and Allied Health Technologies Division.

- Obtain approved Criminal History Report if selected by a program. A completed report from an approved provider must be submitted prior to entry into any Nursing and Allied Health Technologies program. Contact the Health Technologies administration office for the Floyd County campus or the Nursing and Allied Health Division for the Catoosa and Walker County campus for an approved list of providers.
- Complete a Health Stream or Tennessee Clinical Placement System TCPS orientation if attending the Walker County Campus. The cost is ten dollars (\$10). This fee for online in-services is required by all area hospitals that serve as clinical sites for GNTC in Walker County, Whitfield County and Hamilton County, TN.
- Pay the Nursing and Allied Health Liability Insurance Fee: Class I Level Student \$12 Class II Level Student (EMT/Paramedic Only) \$46

### **II. Admissions Categories**

Admission to the Nursing and Allied Health Technologies Division will be in one of the following categories. Minimum admission requirements are implemented for each standard degree, diploma, or certificate program.

- a. Learning Support/Provisional (During pre-occupational curriculum only)
- b. Nursing and Allied Health (Pre-occupational)
- c. Occupational

A. Learning Support/Provisional Admissions: Persons who seek to enroll at Georgia Northwestern Technical College and do not satisfy required admission standards for entry into the Nursing and Allied Health Technologies Programs are classified as Learning Support or Provisional admission status as defined in the Admissions Status section of the Admissions Policy. Upon completion of Learning Support or Provisional status requirements, students will be classified as Regular status.

B. Nursing and Allied Health - Pre-occupational: All students taking pre-occupational curriculum in preparation for admission into a Nursing and Allied Health program are enrolled in either Health Care Assistant (HA21), Health Care Science (HS21), and/or Technical Specialist (TC31). This qualifies the student to receive financial aid while taking the required courses for admission into the Nursing and Allied Health Technologies program of choice.

C. Occupational Program: These students are accepted into their respective programs and have completed all pre-occupational curriculum, all program specific requirements, and are either awaiting occupational course start or are currently taking occupational curriculum.

### **III. Course Validity Duration**

Certain pre-occupational curriculum are considered to be of key importance to program completion and are only valid within a set time frame preceding occupational program entry. Students who have completed bachelor degrees, been employed 3 of the past 5 years in an allied health occupation, involved in direct patient care, or are currently in the Nursing and Allied Health - (program designated) category may apply for a duration extension at the discretion of the Nursing and Allied Health Technologies Division faculty. Students may take and pass an exam covering the objectives of the course if the duration of acceptance time has elapsed.

### Course

### **Duration of acceptance**

course	Burution of acceptance
Algebraic Concepts	2 years
Anatomy & Physiology with lab	5 years
Anatomy & Physiology without lab	2 years
College Chemistry	5 years
College Algebra	5 years
General Mathematics	2 years
College Physics	5 years
Psychology	No Limit
English	No Limit
Introduction to Computers	No Limit
*Patient Care/Introduction to Health Care	5 years
Medical Ethics & Law	5 years
Medical Terminology	5 years

\*To receive credit for this course, students must be able to demonstrate the necessary practical factors associated with hand washing, gloving, isolation techniques, and vital sign determination. A current health care provider level CPR card is required as well.

### **Competency Tests**

Competency tests are administered each semester for persons wishing to establish credit for courses they have taken, for which they received a grade of "C" or better, which have exceeded the course validity limit. These courses may be transfer courses or courses taken at GNTC. The competency test establishes that they still retain competency in that subject.

For details on competency testing at GNTC, refer to the "Academic Information" section of this catalog.

Upon petition from a student, credit by examination may be given. If circumstantial evidence, such as experiential learning, indicates the probability of special technical aptitude or knowledge on the part of the petitioning student, a written, oral, and/or performance examination will be developed and administered by an instructor of the course. Permission to take such an examination must be granted by a Health Technology or Nursing and Allied Health Technologies instructor. Students who score 80% or higher on all components of the examination will be awarded a grade of "EX" for the course. The "EX" indicates credit by examination. The "EX" carries no grade points, but the number of credit hours normally assigned to the course will be awarded. A student is eligible to challenge a course only one time. The challenge exam must be taken before the first day of the class in which the student is enrolled. If the student misses his/her scheduled exam appointment, he/she must complete another application with payment and reschedule with the instructor.

## **Entrance Requirements for Nursing and Allied Health Technologies**

### I. Age:

17 years old for entrance into Nursing and Allied Health pre-occupational curriculum 18 years old for entrance into Nursing and Allied Health programs

### **II. Education:**

A high school diploma or GED<sup>®</sup> is required for all Nursing and Allied Health programs. Detailed information about education requirements is found under the Education section of the Admissions Policy.

### III. Health:

Applicants must be able to attend school regularly and meet the physical and mental performance requirements of their course, including those required at the medical affiliates. All Nursing and Allied Health Technologies programs require completion of the Medical Report Form after receiving official acceptance into the program. Medical Report Forms cannot be issued prior to program entry.

### **IV. Assessment Results:**

Applicants for all health programs must make the minimum required scores in reading, writing, and numeric skills (including algebra for some programs) on the Admission Placement Test (ASSET/COMPASS) or one of the approved entrance tests (example, SAT, ACT) to be admitted as regular students. Generally, students are not admitted to Nursing and Allied Health Technologies programs on a provisional basis. An applicant who has completed, with a "C" grade or better, transferable English or math courses from an accredited institution may be exempt from taking the entrance examination.

### **Minimum Required Scores**

Refer to the Required Minimum Scores for Regular Admission section of the Admissions Policy for required placement test scores for Nursing and Allied Health Technology programs.

### V. Criminal Background Results:

Each student in Nursing and Allied Health Technologies must have a criminal background check done by an approved agency. Students may contact the Health Technologies administration staff (Floyd County Campus) at 706-295-6882 or 706-295-6966 or the Nursing and Allied Health Technologies administration staff (Walker County Campus) at 706-764-3851 or 706-764-3520 to obtain a list of approved agencies. Once the approved background check has been completed, any questionable results will be reviewed by the clinical affiliates at which the students would be performing their clinical practicum. If the clinical affiliates cannot allow a student to participate at their sites due to the results of the criminal background check, the program faculty will make an effort to place the student at another clinical affiliate. If the faculty is unable to find a clinical affiliate that will allow the student to participate in clinical practicum at their sites, the student will not be able to enter or complete the Nursing and Allied Health Technologies program.

Note: Some Nursing and Allied Health Technologies programs have additional requirements, such as volunteer or observation time, additional course completion, additional test scores, or state licensure prerequisites. Please refer to the specific program description for more detailed information.

### **Physical and Mental Essential Requirements**

The Nursing and Allied Health Technologies Division faculty has specified the following non-academic criteria (technical standards) which all applicants and enrolled students are expected to meet in order to participate in the Nursing and Allied Health Technologies Division programs and professional practice. Please refer to the specific program description for more detailed or specific information.

The ability to meet these requirements is documented by physical exam. A student is considered compliant when the GNTC Nursing and Allied Health Medical Report Form has been completed and signed by a physician, nurse practitioner, or physician's assistant.

All candidates for any Nursing and Allied Health Technologies program must meet intellectual, physical, and social core performance standards necessary to provide safe patient care in an independent manner. The areas below include examples of necessary activities and skills but are not all-inclusive. 1. Critical Thinking: Critical thinking ability sufficient for clinical judgment. Examples include identification of cause/effect relationships in clinical situations, development of plans of care, transferring knowledge from one situation to another; evaluating outcomes; problem solving; prioritizing; and using short and long term memory. \*, \*\*

2. Interpersonal: Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural and intellectual backgrounds. Examples include establishing rapport with patients/clients, families, and colleagues; negotiation of interpersonal conflict; and respect of cultural diversity.

3. Communication: Communication abilities sufficient for verbal and written interaction with others. Examples include explanation of treatment procedures; initiation of health teaching, documentation and interpretation of nursing actions and patient/client responses; and written and oral reports to other health care professionals.\*

4. Mobility: Physical abilities sufficient for movement from room to room and in small spaces. Examples include moving around in a patient's room, work spaces and treatment areas; administration of cardiopulmonary procedures such as resuscitation; sitting or standing and maintaining balance for long periods; twisting, bending, stooping; moving quickly in response to possible emergencies; pushing, pulling, lifting or supporting a dependent adult patient; squeezing with hands and fingers; and repetitive movements.

5. Motor Skills: Gross and fine motor abilities sufficient for providing safe, effective nursing and patient care. Examples include calibration and use of equipment, positioning of dependent adult patients/clients, grasping and manipulation of small objects/instruments, using a computer keyboard, and writing with a pen.\*

6. Hearing: Auditory ability sufficient for monitoring and assessing health needs. Examples include hearing monitor and pump alarms, emergency signals fire alarms, auscultatory sounds, and cries for help.

7. Visual: Visual ability sufficient for observation and assessment necessary in nursing care. Examples include observation of patient/client responses such as respiratory rate and depth, skin color, and other physical signs; visualization of monitors, watches with second hands, medication labels and vials, and increments on a medication syringe; visualization of objects from twenty inches to twenty feet away; use of depth perception and peripheral vision; distinguishing colors; and reading written documents.

8. Tactile: Tactile ability sufficient for physical assessment. Examples include performance of palpation, functions of physical examination (such as discrimination of pulses and detection of temperature), and functions related to therapeutic intervention (such as insertion of a catheter).

9. Emotional: Emotional stability sufficient to tolerate rapidly changing conditions and environmental stress. Examples include establishment of therapeutic interpersonal boundaries, providing patients/clients with emotional support, adapting to changing conditions in the work environment and stress, dealing with unexpected or unpredictable events, maintaining focus on task, performing multiple tasks concurrently, and being able to handle strong emotions.

Taken from Southern Council on Collegiate Education for Nursing (1993, reapproved 2004) and National Council of State Boards of Nursing, Inc: Guidelines for Using Results of Functional Abilities Studies and Other Resources (1999).

Work Environment Associated Risks

These include

1) Handling sharp instruments;

2) Exposure to infections (communicable diseases);

3) Strains (heavy lifting);

4) Exposure to latex;

OSHA Risk Factor - Category A Includes

1) Exposure to blood and other body fluids.

2) Exposure to noxious smell, either toxic or non-toxic.

3) Exposure to toxic fumes, gases, vapors, mists, or liquids which could, depending on the chemical, cause general or localized disabling conditions as a result of inhalation, ingestion, or action on the skin.

\*Is additionally documented by satisfactory completion of the pre-occupational course requirements.

\*\*Is additionally documented by satisfactory completion of the ASSET/COMPASS Entrance Exam requirements of the Nursing and Allied Health Technologies programs.

### Nursing and Allied Health Technologies Program Accreditations

Some individual programs within the Nursing and Allied Health Technologies Division hold program specific accreditations or state required department approvals. Individual program accreditations and approval are identified below:

### Associate of Science in Nursing

The Associate of Science in Nursing program at Georgia Northwestern Technical College is approved by the Georgia Board of Nursing (www.sos.state.ga.us/plb/rn) and the National League for Nursing Accrediting Commission, Inc. (www.nlnac.org).

Georgia Office of Secretary of State Professional Licensing Boards Division 237 Coliseum Drive Macon, GA 31217-3858 Telephone: 478-207-1300

National League for Nursing Accrediting Commission, Inc. 3343 Peachtree Road, NE, Suite 500 Atlanta, GA 30326 Telephone: 404-975-5000 Fax 404-975-5020

### **Medical Assisting**

The Medical Assisting program at Georgia Northwestern Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs 1361 Park Street Clearwater, FL 33756 Telephone: 727-210-2350

### Paramedic Technology/EMT Program

The Paramedic Technology program at Georgia Northwestern Technical College is approved by the state of Georgia Department of Human Resources Emergency Medical Services Division (www.dhr.georgia.gov).

Georgia Department of Human Resources Constituent Services

2 Peachtree Street, NW Suite 29-213 Atlanta, Georgia 30303 Telephone: 404-651-6316

### Patient Care Assistant(CNA)

The Patient Care Assistant program at Georgia Northwestern Technical College is approved by the Georgia Health Partnership (www.ghp.ga.gov).

Georgia Health Partnership Nurse Aide Training Program 1455 Lincoln Parkway E., Suite 750 Atlanta, GA 30346-2200 Telephone: 678-527-3607 1-800-414-4358

### **Practical Nursing**

The Practical Nursing program at Georgia Northwestern Technical College is approved by the Georgia Board of Examiners of Licensed Practical Nursing (www.sos.state. ga.us/plb/Ipn).

Georgia Office of Secretary of State Professional Licensing Boards Division 237 Coliseum Drive Macon, GA 31217-3858 Telephone: 478-207-1300

### Surgical Technology

The Surgical Technology program at Georgia Northwestern Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Review Committee on Education in Surgical Technology (ARC-ST) (www.arcst.org).

Commission on Accreditation of Allied Health Education Programs 1361 Park Street Clearwater, FL 33756 Telephone: 727-210-2350

### Pre-Occupational and Occupational Course Requirements

### **Degree and Diploma Programs**

Courses taken during a student's pre-occupational period provide a foundation of knowledge built upon later during the occupational program courses. Preoccupational courses must be taken before a student enters the program of choice for which they qualify. Occupational courses must be taken after a student is accepted and enters the program for which they qualify. Specific pre-occupational and occupational course requirements for each degree and diploma program are listed on the following pages. See the individual program advisor for more information.

### NURSING (NU33) ASSOCIATE OF SCIENCE IN NURSING (ASN)

### **Campus Availability:**

Walker County Campus

### **Program Description:**

The Associate of Science in Nursing program at Georgia Northwestern Technical College prepares the learner to apply the behaviors, knowledge, and skills required of a self-directed, critical thinking, beginning nurse generalist. Upon successful completion of the program, the graduate will be able to function as a provider of care, manager of care, and member of the discipline of nursing. The program has received approval from the Georgia Board of Nursing and accreditation by the National League for Nursing Accreditation Commission.

### Length of Program:

Minimum 4 (FOUR) semesters after being admitted into Nursing courses.

### **Entrance Date:**

Beginning of any semester for pre-occupational curriculum, fall semester for occupational curriculum

## Entrance Requirements for Entering Nursing Pre-Occupational Curriculum (See guidelines on the following pages for additional requirements)

Age: Minimum of 17 years of age

**Education:** High school diploma or GED is required.

**Assessment Results:** Applicants must achieve minimum scores in reading, writing, and numeric skills on the entrance test. Applicants failing to attain minimum scores may receive refresher/remedial instruction through the Learning Support program at GNTC in order to meet admission requirements. Previous training and/or education may be evaluated to provide advanced placement in the program.

Program Final Exit Point: Nursing Associate Degree

Pre-Occupat	Credit Hours**	
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1
*PSYC 1101	Introduction to Psychology	3
*PSYC 2103	Human Development	3
*MATH 1111	College Algebra	3
*ENGL 1101	Composition and Rhetoric	3
*ENGL 2130	Literature and Composition	3
or		
*HUMN 1101	Introduction to Humanities	(3)
or		
*MUSC 1101	Music Appreciation	(3)
*SPCH 1101	Public Speaking	3

(Program requirements continued on following page)

### NURSING (CONT.)

Nursing Curriculum (42 Credit Hours)		Credit Hours**
RNSG 1110	Fundamentals of Nursing	6
RNSG 1120	Dosage Calculations and Basic Pharmacology	2
RNSG 1130	Lifespan Nursing Care I	7
RNSG 1140	Nursing Care to Promote Mental Health	6
RNSG 2110	Lifespan Nursing Care II	7
RNSG 2120	Nursing Care of the Childbearing Family	6
RNSG 2130	Lifespan Nursing Care III	7
RNSG 2140	Capstone Nursing Seminar	1

### **Total Credit Hours: 72 Minimum Credit Hours for Graduation**

\*\*Hours Legend:

Class Hours: One credit for one clock hour per week.

Clinical Hours: One credit hour for three clock hours per week.

Note: The Nursing Division has a prepared program course sequence in which students in the ASN program take the required classes. Please contact the Nursing Division for more information.

**Associate of Science in Nursing (ASN) Guidelines:** The Associate of Science in Nursing program at Georgia Northwestern Technical College prepares the learner to apply the behaviors, knowledge, and skills required of a self-directed, critical thinking, beginning nurse generalist. Upon successful completion of the program, the graduate will be able to function as a provider of care, manager of care, and member of the discipline of nursing. The program has received approval from the Georgia Board of Nursing and accreditation by the National League for Nursing Accreditation Commission. Students who meet all the admission requirements of the college and are candidates for the ASN program, may begin taking general education core courses at any time. Students who are enrolled in these courses should understand that enrollment in general education core courses does not guarantee admission to the ASN program. They should also be aware that there is a high level of competition for entrance into the nursing sequence. Students must be 17 years of age before entering the nursing sequence in order to comply with clinical facility requirements.

### Admission Requirements (Generic Track)

Selection for admission to the ASN program is based on a point system, which includes consideration of course grades, state of residency, number of core courses that have been completed and pre-entrance examination scores. Selection for entrance into the fall class will be made during the prior spring semester. An application to the ASN program (available in the Nursing office on the Walker County campus or on the program website) must be completed and received by this office no later than February 1 for inclusion in that year's applicant pool for the following fall semester. Applications received after this date will not be considered. The application may be submitted at any time after acceptance to the college and declaring nursing as a major/minor. By the end of the spring semester prior to selection, the applicants must:

1) be officially admitted to Georgia Northwestern Technical College and have declared Associate of Science in Nursing as a major/minor;

- 2) have completed all Learning Support courses;
- 3) have biology course credits within the past five years;

4) have a cumulative grade point average of at least 3.0 calculated for the program required core courses completed;

5) obtain a minimum score of 75% on each component of the HESI Admission Assessment Exam;

6) be able to meet the technical standards listed under "Essential Requirements for Nursing".

### Selection Process

Students who submitted an application to the ASN division by the February 1st deadline will receive a letter notifying them of the dates, times, location, and cost of the entrance exam. Should a student register for the exam and not take it on the assigned date, the cost of the exam will be forfeited. That student will not be considered for selection. When exam results are received and fall semester grades have been posted, faculty will begin the selection process using a point system that considers course grades, state of residency, number of core courses that have been completed and pre-entrance exam scores. Students will be notified by letter that they are accepted or not accepted. Students who are not accepted will have the opportunity to be considered for the next year's class, but have to indicate this on a form to be submitted to the nursing office. They will have an opportunity to retest the following year, if they so desire or they may keep their current scores. Students who retest must pay another exam fee. Once students are selected for admission to the ASN program, they must attend a mandatory orientation session. The dates and times will be included in the acceptance letter. During the orientation, the students will receive additional information about program requirements. This will include:

1) American Heart Association CPR certification for the Healthcare Provider;

- 2) Student liability insurance;
- 3) Personal health history;
- 4) Physical assessment by a healthcare provider;
- 5) Record of immunizations and titers;
- 6) TCPS orientations;
- 7) ASN student handbook.

Upon admission to the program, students must also have a mandatory background check and a mandatory annual random drug screen performed at students' expense.

### **Retention Policies**

In order to progress through the Associate of Science in Nursing program, students must:

1) Maintain a cumulative GPA of 2.5 (75%) or better. This average or greater must be achieved in each course in order to progress to the next quarter of the nursing program.

2) Meet special requirements in academic achievement required by some courses, such as specified percentages on dosage calculation examinations and completion of standardized tests;

3) Attain an overall 75% or better unit test average, and an overall total test average of 75% (unit exams plus final exam) excluding other points;

4) Have satisfactory clinical and skills performance as defined on the clinical evaluation tool in each clinical course.

5) Maintain CPR certification and carry professional liability insurance while enrolled in nursing courses. Students will not be allowed in the clinical agencies without CPR certification and liability insurance.

6) Maintain annual health requirements.

### **Readmission Policies and Requirements**

Students who do not progress in the nursing program may be considered for readmission to the program. Only one readmission into the nursing program per track is permitted. Each track (generic and transition) will be considered separately when considering the two attempts. In addition, if a student who has been unsuccessful twice wishes to reenter, he/she may be reconsidered after a period of five years. The student must meet all current entry requirements and their biology sequence must be current (or the classes retaken) Students must continue to be in good standing with the institution and the nursing program (i.e. no disciplinary or academic misconduct on record). Students must complete a request for readmission and meet with the director of the ASN program for an interview at least one semester prior to the semester of readmission. In order to be considered for readmission, students must:

- 1) Meet the current admission requirements.
- 2) Enroll in both nursing courses of the semester.
- 3) Complete current program requirements.

Re-entry is conditional upon class and clinical space availability. If reentry is requested for RNSG 1110 or RNSG 1120 (first semester nursing courses), the student will be placed back into the applicant pool for the next class selection. The reentering students will be ranked using the same process as all other candidates. If the student is unsuccessful in either RNSG 1110 or RNSG 1120, both courses must be repeated upon readmission. The student must meet the current admission requirements, enroll in both nursing courses of the semester, and complete current program requirements.

If the reentry is for any subsequent courses, a reentry score will be calculated based on prior nursing course averages and dosage calculations examination averages. The student will then be ranked according to the reentry score. The student must have maintained a cumulative GPA of 3.0, meet other current admission requirements, enroll in the unsuccessful and the co-requisite course, and complete current program requirements. All efforts will be made to facilitate reentry.

### **Graduation Requirements**

All courses in the nursing curriculum must be successfully completed in order to graduate. Only students who have completed required course work, and received the ASN degree are eligible to sit for the NCLEX-RN exam for licensure as a registered nurse. Students must also pass a HESI Exit Exam, which will be administered during the RNSG 2140 Nursing Capstone course in the final semester of the program. Students must score 875 on the HESI Exit Exam within three attempts to pass RNSG2140. Students will be required to submit remediation between attempts as specified by the nursing faculty within time frames that will be determined on a case-by-case basis. If they do not pass the HESI Exit Exam before the end of spring semester, they will receive an incomplete in the course and will not be able to graduate. If they score 875 on a subsequent attempt, the incomplete will be changed to the earned grade; and they will be able to apply to sit for the NCLEX-RN if they meet all other course, program, and graduation requirements. If the required HESI score is not achieved within three attempts, they will not pass RNSG 2140 and will have to repeat the course, as well as the co-requisite nursing course of that semester. Re-entry is on a space-available basis. (See Readmission Policies and Requirements)

### Licensure Availability

The Georgia Board of Nursing has the authority to render a potential candidate ineligible for licensure as a registered nurse based on previous events, such as misdemeanor and/or felony conviction. Administrative Code 43-26-11 of the Georgia Board of Nursing states:

The board shall have the authority to refuse to grant a license to an applicant, to revoke the license of a licensee, or to discipline a licensee upon a finding by the board that the applicant or licensee has:

1) Been convicted of any felony, crime involving moral turpitude, or crime violating a federal or state law relating to controlled substances or dangerous drugs in the courts of this state or any other state, territory, or country, or in the courts of the United States, including but not limited to a plea of nolo contendere entered to the charge;

2) Displayed an inability to practice nursing as a registered professional nurse or licensed undergraduate nurse with reasonable skill and safety due to illness, use of alcohol, drugs, narcotics, chemicals, or any other type material, or as a result of any mental or physical condition.

#### NURSING LPN TO ASN TRANSITION PROGRAM (NLT3) ASN- ASSOCIATE OF SCIENCE IN NURSING

## **Campus Availability:**

Walker County Campus

#### **Program Description:**

The Associate of Science in Nursing Degree program at Georgia Northwestern Technical College prepares the learner to apply the behaviors, knowledge, and skills required of a self-directed, critical thinking, beginning nurse generalist. Upon successful completion of the program, the graduate will be able to function as a provider of care, manager of care, and member of the discipline of nursing. The program has received approval from the Georgia Board of Nursing and accreditation by the National League for Nursing Accreditation Commission.

#### Length of Program:

Minimum of 3 Semesters (including the summer term)

#### Entrance Date:

Beginning of any semester for pre-occupational curriculum, summer semester for occupational curriculum

# Entrance Requirements for Entering Nursing Pre-Occupational Curriculum (See guidelines on previous pages.)

Age: Minimum of 17 years of age

Education: High school diploma or GED is required.

**Assessment Results:** Applicants must achieve minimum scores in reading, writing, and numeric skills on the entrance test. Applicants failing to attain minimum scores may receive refresher/remedial instruction through the Learning Support program at GNTC in order to meet admission requirements. Previous training and/or education may be evaluated to provide advanced placement in the program.

Program Final Exit Point: Nursing Associate Degree

Pre-Occupat	ional Curriculum (30 Credit Hours)	Credit Hours**
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1
*PSYC 1101	Introduction to Psychology	3
*PSYC 2103	Human Development	3
*MATH 1111	College Algebra	3
*ENGL 1101	Composition and Rhetoric	3
*ENGL 2130	Literature and Composition	3
or		
*HUMN 1101	Introduction to Humanities	(3)
or		
*MUSC 1101	Music Appreciation	(3)
*SPCH 1101	Public Speaking	3
(D	(	

## NURSING LPN TO ASN TRANSITION (CONT.)

Nursing Cur	riculum (30 Credit Hours)	Credit Hours**
RNSG 2010	LPN to ASN Transition	9
RNSG 2110	Lifespan Nursing Care II	7
RNSG 2120	Nursing Care of the Childbearing Family	6
RNSG 2130	Lifespan Nursing Care III	7
RNSG 2140	Capstone Nursing Seminar	1

#### Total Credit Hours: Minimum 60 Credit Hours for Graduation

\*\*Hours Legend:

Class Hours: One credit for one clock hour per week. Clinical Hours: One credit hour for three clock hours per week.

Note: The Nursing Division has a prepared program course sequence in which students in the ASN program take the required classes. Please contact the Nursing Division for more information.

## **Nursing LPN to ASN Transition Guidelines:**

#### **Transition Students**

The Associate of Science in Nursing degree program has an accelerated track for LPNs who desire to transition to ASN. The LPN to ASN Transition track of the ASN program provides qualified licensed practical nurses the opportunity to advance their formal nursing education to achieve an Associate of Science in Nursing degree and qualify to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN). The program builds on the previous education and experience of the LPN providing an accelerated track for completion of the degree requirements.

## Admission Requirements (Transition Track)

A licensed practical nurse (LPN) may receive advanced placement in the nursing program if he/she holds a valid unencumbered license with documentation of employment as a LPN with a minimum of 2000 clock hours within three years prior to admission. Admission is competitive and based on a point system that considers course grades, state of residency, and pre-entrance examination scores. The applicants must:

1) Be officially admitted to Georgia Northwestern Technical College and declared Associate of Science in Nursing Degree as a major/minor;

2) Have completed all required core courses by the end of Spring Semester;

3) Have science course credits less than 5 years old;

4) Have a cumulative grade point average (GPA) of a least 3.0 calculated for the program required core courses.

5) Obtain a minimum score of 75% on each component of the HESI Admission Assessment Exam;

6) Obtain a minimum score of 850 on the HESI LPN to ADN exam;

7) Obtain an 85% score on a dosage calculation examination within two attempts

8) Validate selected nursing skills;

9) Be able to meet the physical demands requirements as listed under "Essential Requirements for Nursing" (See college catalog); 10) Have an application to the Nursing program on file in the nursing office by February 1st prior to the summer term they plan to begin the nursing sequence.

#### **Process for Application**

Students may apply to the associate of science in nursing program at any time after acceptance to the college and declaring nursing as their major.

1) Obtain an application form from the Nursing Office (Walker campus) or the program web site;

2) Return the completed application form to the above office no later than February 1st preceding the summer term they wish to enter the program;

3) Submit a copy of current LPN license and proof of employment hours

#### Selection Process

During fall semester the Nursing and Allied Health Technologies secretary will send a letter to LPNs who have applied for advanced placement in the ASN program by the February 1st deadline. This letter will notify the students about the date, time, location, and cost for the administration of the pre-entrance examination. After receipt of the letter, students should:

1) Return the enclosed form indicating intent to take the examination;

2) Pay and register for the examination as instructed. The pre-entrance examination, HESI ENTRANCE EXAM, will have to be taken by the deadline stated in the letter. Failure to take the examination will result in forfeiture of the examination cost. Applicants can take this exam twice every 12 months and the scores are valid for a period of 3 years. Those applicants who obtain a minimum score of 75% on each component of the HESI Admission Assessment Exam will be eligible to take the HESI LPN to ADN exam which can only be taken once per year. Upon attainment of a minimum score of 850 on this examination, applicants will take a dosage calculation examination. The final step in the selection process is validation of selected nursing skills. Once the testing process is complete, students will be selected by the faculty using a point system that includes core course grades, state of residency, and pre-entrance test scores. After the completion of the selection process by the faculty, students will be notified by letter that they are accepted or not. The letter will state the date and time for a mandatory orientation. Applicants who are not accepted will have the opportunity to be considered for the generic nursing class, or they may attempt to enter the transition class the next summer term. For further information about nursing program requirements, please see the associate degree Nursing section of this catalog. Students in the transition track of the ADN program are required to meet the same program requirements as those in the generic track.

#### **Retention Policies**

In order to progress through the Associate of science in Nursing program, students must:

1) Maintain a cumulative GPA of 2.5 (75%) or better. This average or greater must be achieved in each course in order to progress to the next quarter of the nursing program.

2) Meet special requirements in academic achievement required by some courses, such as specified percentages on dosage calculation examinations and completion of standardized tests;

3) Attain an overall 75% or better unit test average, and an overall total test average of 75% (unit exams plus final exam) excluding other points;

4) Have satisfactory clinical and skills performance as defined on the clinical evaluation tool in each clinical course.

5) Maintain CPR certification and carry professional liability insurance while enrolled in nursing courses. Students will not be allowed in the clinical agencies without CPR certification and liability insurance.

6) Maintain annual health requirements.

## **Readmission Policies and Requirements**

Students who do not progress in the nursing program may be considered for readmission to the program. Only one readmission into the nursing program per track is permitted. Each track (generic and transition) will be considered separately when considering the two attempts. In addition, if a student who has been unsuccessful twice wishes to reenter, he/she may be reconsidered after a period of five years. The student must meet all current entry requirements and their biology sequence must be current (or the classes retaken) Students must continue to be in good standing with the institution and the nursing program (i.e. no disciplinary or academic misconduct on record). Students must complete a request for readmission and meet with the director of the ASN program for an interview at least one semester prior to the semester of readmission. In order to be considered for readmission, students must:

1) Meet the current admission requirements.

- 2) Enroll in both nursing courses of the semester.
- 3) Complete current program requirements.

Re-entry is conditional upon class and clinical space availability. If reentry is requested for RNSG 1110 or RNSG 1120 (first semester nursing courses), the student will be placed back into the applicant pool for the next class selection. The reentering students will be ranked using the same process as all other candidates. If the student is unsuccessful in either RNSG 1110 or RNSG 1120, both courses must be repeated upon readmission. The student must meet the current admission requirements, enroll in both nursing courses of the semester, and complete current program requirements.

If the reentry is for any subsequent courses, a reentry score will be calculated based on prior nursing course averages and dosage calculations examination averages. The student will then be ranked according to the reentry score. The student must have maintained a cumulative GPA of 3.0, meet other current admission requirements, enroll in the unsuccessful and the co-requisite course, and complete current program requirements. All efforts will be made to facilitate reentry.

## **Graduation Requirements**

All courses in the nursing curriculum must be successfully completed in order to graduate. Only students who have completed required course work, and received the ASN degree are eligible to sit for the NCLEX-RN exam for licensure as a registered nurse. Students must also pass a HESI Exit Exam, which will be administered during the RNSG 2140 Nursing Capstone course in the final semester of the program. Students must score 875 on the HESI Exit Exam within three attempts to pass RNSG2140. Students will be required to submit remediation between attempts as specified by the nursing faculty within time frames that will be determined on a case-by-case basis. If they do not pass the HESI Exit Exam before the end of spring semester, they will receive an incomplete in the course and will not be able to graduate. If they score 875 on a subsequent attempt, the incomplete will be changed to the earned grade; and they will be able to apply to sit for the NCLEX-RN if they meet all other course, program, and graduation requirements. If the required HESI score is not achieved within three attempts, they will not pass RNSG 2140 and will have to repeat the course, as well as the co-requisite nursing course of that semester. Re-entry is on a space-available basis. (See Readmission Policies and Requirements)

## Licensure Availability

The Georgia Board of Nursing has the authority to render a potential candidate ineligible for licensure as a registered nurse based on previous events, such as misdemeanor and/or felony conviction. Administrative Code 43-26-11 of the Georgia Board of Nursing states:

The board shall have the authority to refuse to grant a license to an applicant, to revoke the license of a licensee, or to discipline a licensee upon a finding by the board that the applicant or licensee has:

1) Been convicted of any felony, crime involving moral turpitude, or crime violating a federal or state law relating to controlled substances or dangerous drugs in the courts of this state or any other state, territory, or country, or in the courts of the United States, including but not limited to a plea of nolo contendere entered to the charge;

2) Displayed an inability to practice nursing as a registered professional nurse or licensed undergraduate nurse with reasonable skill and safety due to illness, use of alcohol, drugs, narcotics, chemicals, or any other type material, or as a result of any mental or physical condition.

## MEDICAL ASSISTING (MA23) ASSOCIATE OF APPLIED SCIENCE DEGREE

## **Campus Availability:**

#### • Walker County Campus

**Program Description:** The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting associate of applied science degree.

**Entrance Date:** Beginning of any semester for pre-occupational curriculum, summer semester for occupational curriculum

## **Entrance Requirements:**

**Age:** Minimum of 17 years of age **Other:** 

1) Completion of application and related procedures;

2) Achieve a score of 30th percentile on the Psychological Services Bureau, Inc. (PSB) entrance exam. If, after the third attempt on the entrance examination you have not received a score of at least 30, you will need to make an appointment with your advisor;

- 3) Submission of an autobiography;
- 4) Documentation of physical examination and immunization records;
- 5) Ability to comply with health-related standards and meet minimum essential skill requirements;
- 6) Payment of fees for liability insurance;
- 7) Documentation of current CPR certification;
- 8) Completion of background check.

## **Retention Policies:**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next step in the Medical Assisting program;

2) Students must attain a numerical grade of 70 or better in each Medical Assisting course, including clinical rotations, to progress in the program;

3) A student must maintain CPR certification and carry professional liability insurance while enrolled in Medical Assisting courses.

#### **Readmission Policies:**

All current admission requirements must be met before applying for readmission.

# MEDICAL ASSISTING (CONT.)

Pre-Occupa	tional Curriculum (35 Credit Hours)	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
PSYC 1101	Introductory Psychology	3 3 3
MATH 1100	Quantitative Skills and Reasoning	3
or MATH 1101	Mathematical Modeling	(3)
or	-	
MATH 1111	College Algebra	(3)
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
XXXX xxxx	General Education Core Elective	3 3
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
BUSN 1440	Document Production	4
COMP 1000	Introduction to Computers	3
Occupation	al Curriculum (35 Credit Hours)	<b>Credit Hours</b>
MAST 1010	Legal and Ethical Concerns in the Medical Office	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1080	Medical Assisting Skills I	4
MAST 1090	Medical Assisting Skills II	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3
MAST 1120	Human Pathological Conditions in the Medical Office	3
MAST 1170	Medical Assisting Externship	6
MAST 1180	Medical Assisting Seminar	3

## Total Credit Hours: 70 Minimum Credit Hours for Graduation

#### PARAMEDICINE (PT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### Campus Availability:

• Floyd County Campus

## **Program Description:**

The Paramedicine associate of applied science degree program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found on an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine degree program prepares students for employment in paramedic positions in today's health services field. The Paramedic degree program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to apply to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the State Office of Emergency Medical Service and Trauma (SOEMST) as a paramedic.

**Entrance Date:** Any term for Pre-occupational courses. Summer Semester for occupational courses, and as needed.

#### **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs **Other:** 

1)Criminal background checks are required based on the requirements for participation in clinical experiences.

2) Hold a valid driver's license.

3) Complete EMS program application.

4) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

5) To enter into the Paramedic Program, all candidates must be a licensed or certified EMT I-99, AEMT, or an EMT I-85 who has upgraded through the AEMT modules and practical portion.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Note:** EMS students are required to purchase liability insurance. Current cost is \$46.00.

**Note:** Students will be required to purchase mandatory uniform and minimal supplies for the EMS program.

**Program Final Exit point:** Graduates are eligible to apply for the National Registry practical and written examinations. Graduates are also eligible to apply for state licensure (with appropriate requirements) and employment as a Paramedic.

# PARAMEDICINE, (CONT.)

Pre-Occupa	tional Curriculum (26 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social Sciences/Behavioral Sciences Elective	3 3 3
XXXX xxxx	General Education Core Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
Or MATH 1111	College Algebra	(2)
MATH 1111 or	College Algebra	(3)
MATH 1101	Mathematical Modeling	(3)
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
COMP 1000	Introduction to Computers	3
Occupation	al Curriculum (44 Credit Hours)	<b>Credit Hours</b>
EMSP 2110	Foundations of Paramedicine	3
EMSP 2110 EMSP 2120	Applications of Pathophysiology for Paramedics	3
		3 3
EMSP 2120 EMSP 2130 EMSP 2140	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts	3 3 4
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care	3 3 4 3
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care	3 3 4 3 5
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care	3 3 4 3 5 4
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations	3 3 4 3 5 4 4
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I	3 3 4 3 5 4 4 2
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II	3 3 4 3 5 4 4 2 2
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2530	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II Clinical Applications for the Paramedic III	3 3 4 3 5 4 4 2 2 2 2
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2530 EMSP 2540	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II Clinical Applications for the Paramedic III Clinical Applications for the Paramedic III Clinical Applications for the Paramedic III	3 3 4 3 5 4 4 4 2 2 2 2 1
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2530 EMSP 2540 EMSP 2550	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic III Clinical Applications for the Paramedic III Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic IV	3 3 4 3 5 4 4 4 2 2 2 2 1 1
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2520 EMSP 2540 EMSP 2550 EMSP 2560	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II Clinical Applications for the Paramedic III Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic V Clinical Applications for the Paramedic V	3 3 4 3 5 4 4 2 2 2 1 1 1 1
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2520 EMSP 2550 EMSP 2550 EMSP 2550 EMSP 2550	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II Clinical Applications for the Paramedic III Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic VI Clinical Applications for the Paramedic VI Clinical Applications for the Paramedic VI	3 3 4 3 5 4 4 2 2 2 1 1 1 1 1 1
EMSP 2120 EMSP 2130 EMSP 2140 EMSP 2310 EMSP 2320 EMSP 2330 EMSP 2340 EMSP 2510 EMSP 2520 EMSP 2520 EMSP 2540 EMSP 2550 EMSP 2560	Applications of Pathophysiology for Paramedics Advanced Resuscitative Skills for Paramedics Advanced Cardiovascular Concepts Therapeutic Modalities of Cardiovascular Care Therapeutic Modalities of Medical Care Therapeutic Modalities of Trauma Care Therapeutic Modalities for Special Patient Populations Clinical Applications for the Paramedic I Clinical Applications for the Paramedic II Clinical Applications for the Paramedic III Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic IV Clinical Applications for the Paramedic V Clinical Applications for the Paramedic V	3 3 4 3 5 4 4 2 2 2 1 1 1 1

**Total Credit Hours: 70 Minimum Credit Hours for Graduation** 

## SURGICAL TECHNOLOGY (ST13) ASSOCIATE OF APPLIED SCIENCE DEGREE

## **Campus Availability:**

Walker County Campus

#### **Program Description:**

The Surgical Technology, Degree program prepares students for employment in a variety of positions in the surgical field. The Surgical Technology, Degree program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in Surgical Technology. Graduates of the program receive a Surgical Technology degree and are qualified for employment as surgical technologists.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum and winter semester for occupational curriculum.

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs **Other:** 

1) Completion of application and related procedures;

2) Achieve a score of 30th percentile on the Psychological Services Bureau, Inc.

(PSB) entrance exam. If, after the third attempt on the entrance examination you have not received a score of at least 30, you will need to make an appointment with your advisor;

3) Submission of an autobiography;

4) Documentation of a physical examination and immunization records;

5) Ability to comply with health related standards and meet essential skill requirements;

6) Liability insurance payment;

7) CPR certification;

8) Background check

#### **Retention Policies**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next semester of the program;

2) Students must attain a numerical grade of 70 or better in each Surgical

Technology lecture course and 80 in clinical rotations to progress in the program;

3) A student must maintain CPR certification and carry professional liability insurance while enrolled in Surgical Technology courses.

**Program Final Exit Point:** Program graduates will be eligible to sit for the Certified Surgical Technologist examination.

## SURGICAL TECHNOLOGY, (CONT.)

Pre-Occupa	tional Curriculum (35 Credit Hours)	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social Sciences/Behavioral Sciences Elective	3 3 3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1111	College Algebra	(3)
or		
MATH 1101	Mathematical Modeling	(3)
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113L	Anatomy and Physiology Lab I	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114L	Anatomy and Physiology Lab II	1
BIOL 2117	Introductory Microbiology	3
BIOL 2117L	Introductory Microbiology Lab	1
XXXX xxxx	General Education Core Elective	3 3 3
COMP 1000	Introduction to Computers	3
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
Occupation	al Curriculum (41 Credit Hours)	<b>Credit Hours</b>
SURG 1010	Introduction to Surgical Technology	6
SURG 1100	Surgical Pharmacology	2
SURG 1020	Principles of Surgical Technology	5
SURG 1120	Introductory Surgical Practicum I	3 3
SURG 1130	Introductory Surgical Practicum II	3

SURG 2030

SURG 2120

SURG 2130

SURG 2040

Surgical Procedures I

Surgical Procedures II

SURG 2240 Seminar in Surgical Technology

SURG 2140 Advanced Specialty Surgical Practicum I

SURG 2150 Advanced Specialty Surgical Practicum II

Specialty Surgical Practicum I

Specialty Surgical Practicum II

Total Credit Hours: 76 Minimum Credit Hours for Graduation

4 3

3

4

3 3

2

#### EMS PROFESSIONS (EP12) DIPLOMA

## **Campus Availability:**

• Floyd County Campus

## **Program Description:**

Students who complete the EMS Professions diploma will be able to fluidly move into the paramedicine program at the diploma level. Successful completion of the program allows the graduate to apply to take the National Registry of Emergency Medical Technicians AEMT certification examination and to apply for Georgia licensure as an AEMT. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Entrance Date: Any term for Pre-occupational courses. Fall Semester for occupational courses, and as needed.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs

#### **Other:**

1)Criminal background checks are required based on the requirements for participation in clinical experiences.

2) Hold a valid driver's license.

3) Complete EMS program application.

4) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Note:** EMS students are required to purchase liability insurance. Current cost is \$46.00.

**Note:** Students will be required to purchase mandatory uniform and minimal supplies for the EMS program.

**Program Final Exit point:** EMT-B graduates are currently not qualified to work on an ambulance in this region. Graduates are eligible and required to apply for the National Registry Practical and written examinations prior to entry into the AEMT program. AEMT graduates are required to have certification as an EMT-B, EMT-I-85, or EMT I-99 prior to being allowed to take the AEMT practical and written examinations. Graduates are eligible to apply for the Advanced EMT National Registry Examination and for entry into the Paramedicine diploma program. Graduates are also eligible to apply for state licensure (with appropriate requirements) and employment as an Advanced EMT.

# EMS PROFESSIONS, (CONT.)

Pre-Occupa	tional Curriculum (16 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
ALHS 1011	Anatomy and Physiology	5
COMP 1000	Introduction to Computers	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
Occupation	al Curriculum (26 Credit Hours)	<b>Credit Hours</b>
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	EMT Assessment/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock and Trauma for the EMT	3
EMSP 1160	Clinical and Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical and Practical Applications for the AEMT	3

**Total Credit Hours: 42 Minimum Credit Hours for Graduation** 

#### MEDICAL ASSISTING (MA22) DIPLOMA

## **Campus Availability:**

- Floyd County Campus
- Walker County Campus

## **Program Description:**

The Medical Assisting program prepares students for employment in a variety of positions in today's medical offices. The Medical Assisting program provides learning opportunities, which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical assisting. Graduates of the program receive a Medical Assisting Diploma.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Fall semester for occupational curriculum at the Floyd County Campus; summer semester for Walker County Campus.

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into occupational program curriculum

## Other:

- 1) Completion of application and related procedures;
- 2) Achieve a score of 30th percentile on the Psychological Services Bureau, Inc.
- (PSB) entrance exam. If after the third attempt on the entrance examination you have not received a score of at least 30 you will need to make an appointment with your advisor;
- 3) Submission of an autobiography;
- 4) Documentation of physical examination and immunization records;
- 5) Ability to comply with health-related standards and meet minimum essential skill requirements;
- 6) Payment of fees for liability insurance;
- 7) Documentation of current CPR certification;
- 8) Completion of background check.

## **Retention Policies:**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next step in the Medical Assisting program.

2) Students must attain a numerical grade of 70 or better in each Medical Assisting course, including clinical rotations, to progress in the program.

3) A student must maintain CPR certification and carry professional liability insurance while enrolled in Medical Assisting courses.

## **Readmission Policies**

All current admission requirements must be met before applying for readmission.

**Program Final Exit Point:** Graduates from the Medical Assisting program are eligible to apply to take the national certification exam to become certified medical assistants.

# MEDICAL ASSISTING, (CONT.)

Pre-Occupa	tional Curriculum (26 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
ALHS 1011	Anatomy and Physiology	5
COMP 1000	Introduction to Computers	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
ALHS 1040	Introduction to Health Care	3
BUSN 1440	Document Production	4

Occupation	al Curriculum (35 Credit Hours)	Credit Hours
MAST 1010	Legal and Ethical Concerns in the Medical Office	2
MAST 1030	Pharmacology in the Medical Office	4
MAST 1060	Medical Office Procedures	4
MAST 1080	Medical Assisting Skills I	4
MAST 1090	Medical Assisting Skills II	4
MAST 1100	Medical Insurance Management	2
MAST 1110	Administrative Practice Management	3
MAST 1120	Human Pathological Conditions in the Medical Office	3
MAST 1170	Medical Assisting Externship	6
MAST 1180	Medical Assisting Seminar	3

**Total Credit Hours: 61 Minimum Credit Hours for Graduation** 

#### **PARAMEDICINE (PT12)** DIPLOMA

## **Campus Availability:**

• Floyd County Campus

## **Program Description:**

The Paramedicine diploma program prepares students to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found on an ambulance. The Paramedic is a link from the scene into the health care system. The Paramedicine diploma program prepares students for employment in paramedic positions in today's health services field. The Paramedic diploma program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to upgrade present knowledge and skills from the EMT/EMT-I 1985/AEMT levels to a paramedic level. Successful completion of the program allows the graduate to apply to take the National Registry of Emergency Medical Technicians (NREMT) Paramedic certification examination and apply for Georgia licensure with the State Office of Emergency Medical Service and Trauma (SOEMST) as a paramedic.

Entrance Date: Any term for Pre-occupational courses. Summer Semester for occupational courses, and as needed.

## **Entrance Requirements:**

**Age:** 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs

#### **Other:**

1)Criminal background checks are required based on the requirements for participation in clinical experiences.

2) Hold a valid driver's license.

3) Complete EMS program application.

4) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

5) To enter into the Paramedic Program, all candidates must be a licensed or certified EMT I-99, AEMT, or an EMT I-85 who has upgraded through the AEMT modules and practical portion.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Note:** EMS students are required to purchase liability insurance. Current cost is \$46.00.

Note: Students will be required to purchase mandatory uniform and minimal supplies for the EMS program.

**Program Final Exit point:** Graduates are eligible to apply for the National Registry practical and written examinations. Graduates are also eligible to apply for state licensure (with appropriate requirements) and employment as a Paramedic.

# PARAMEDICINE, (CONT.)

Pre-Occupa	tional Curriculum (16 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
ALHS 1011	Anatomy and Physiology	5 3
COMP 1000	Introduction to Computers	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
Occupation	al Curriculum (44 Credit Hours)	<b>Credit Hours</b>
EMSP 2110	Foundations of Paramedicine	3
EMSP 2120	Applications of Pathophysiology for Paramedics	3
EMSP 2130	Advanced Resuscitative Skills for Paramedics	3
EMSP 2140	Advanced Cardiovascular Concepts	4
EMSP 2310	Therapeutic Modalities of Cardiovascular Care	3
EMSP 2320	Therapeutic Modalities of Medical Care	5
EMSP 2330	Therapeutic Modalities of Trauma Care	4
EMSP 2340	Therapeutic Modalities for Special Patient Populations	4
EMSP 2510	Clinical Applications for the Paramedic I	2
EMSP 2520	Clinical Applications for the Paramedic II	2
EMSP 2530	Clinical Applications for the Paramedic III	2
EMSP 2540	Clinical Applications for the Paramedic IV	1
EMSP 2550	Clinical Applications for the Paramedic V	1
EMSP 2560	Clinical Applications for the Paramedic VI	1
EMSP 2570	Clinical Applications for the Paramedic VII	1
EMSP 2710	Field Internship for the Paramedic	2
EMSP 2720	Practical Applications for the Paramedic	3

**Total Credit Hours: 60 Minimum Credit Hours for Graduation** 

#### PRACTICAL NURSING (PN12) DIPLOMA

## **Campus Availability:**

- Floyd County Campus
- Walker County Campus

## **Program Description:**

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of academic and occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. A variety of clinical experiences are planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a Practical Nursing diploma and have the qualifications of an entry-level practical nurse.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Every semester is a possible entrance semester for occupational curriculum at the Floyd County campus. Spring and fall semesters for occupational curriculum in the day program; fall semester, even years, in the night program, at the Walker County campus. Students will be accepted as they become eligible to progress to the occupational curriculum and according to class maximum for the semester.

## **Entrance Requirements:**

The Practical Nursing program gives students the knowledge, skills, and attitudes necessary to succeed in practical nursing. The program provides educational opportunities regardless of race, color, national origin, religion, sex, age, disability, academic disadvantage, or economic disadvantage. Program graduates are to be competent in communications, math, interpersonal relations, anatomy and physiology, drug calculations, administration of medications, nutrition and diet therapy, nursing ethics, patient care, and wellness and prevention of illness. The PN program strives to meet the health care needs of the community which it serves, working in conjunction with specific agencies that employ its graduates. The following guidelines have been established in considering applicants for admission to the PN program. They may be evaluated and revised as necessary by faculty and administration.

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs **Assessment Results:** If the placement test results indicate that the student is not academically prepared to enter the program, the student may be granted Learning Support or provisional admission status to the college and be placed in one or more Learning Support classes.

## Other:

- 1) Submit a student application for the PN program;
- 2) Submit two personal references;

3) Take the Nursing Psychological Services Bureau (PSB) entrance examination and score at least 40th percentile or above. If after a third attempt at the entrance examination you have not achieved a score of at least 40, you will need to make an appointment with your advisor;

## PRACTICAL NURSING, (CONT.)

4) Attend the PN program orientation after acceptance and prior to the first nursing course;

5) GPA of 3.0 on all core curriculum which includes all of the following: ENGL 1010, MATH 1012, PSYC 1010, and ALHS 1011.

Students transferring from other regionally accredited nursing programs may receive advance placement if:

1) The above requirements have been met;

2) Student was in good standing at his or her previous institution;

3) A personal reference from the nursing faculty of the previous institution has been submitted;

4) Nursing courses have been completed within two years prior to application;

5) Science courses have been completed within two years prior to application.

#### **Retention Policies:**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next semester of the nursing program. In all nursing courses and PNSG 2010, students must attain a 75% unit test average. PNSG 2010 requires an 85% score on the drug calculation exam;

2) Students must attain an overall numerical grade of 75 or better in each nursing course, including clinical rotations, to progress in the program;

3) Students must maintain CPR certification and carry professional liability insurance while enrolled in nursing courses.

#### **Readmission Policies:**

 All current admission requirements must be met before applying for readmission;
 Students must continue to be in good standing with the college and the nursing program (i.e., no disciplinary or academic misconduct on record);

3) Unsuccessful students will be allowed only one readmission into the nursing course in which they were unsuccessful;

4) After an unsuccessful course, the student is required to wait at least one semester before re-entering that course;

5) After the second failure, the student will be dropped from the nursing program, and faculty will assist the student in selecting another career path.

**Program Final Exit Point:** Graduates from the Practical Nursing program are eligible to take the NCLEX-PN Exam for Georgia State Board to become a licensed practical nurse (LPN).

Pre-Occupa	tional Curriculum (19 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
ALHS 1011	Anatomy and Physiology	5
ALHS 1060	Diet and Nutrition for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3

## PRACTICAL NURSING, (CONT.)

Occupationa	al Curriculum (41 Credit Hours)	<b>Credit Hours</b>
PNSG 2010	Introduction to Pharmacology and Clinical Calculations	2
PNSG 2030	Nursing Fundamentals	6
PNSG 2035	Nursing Fundamentals Clinical	2
PNSG 2210	Medical-Surgical Nursing I	4
PNSG 2220	Medical-Surgical Nursing II	4
PNSG 2230	Medical-Surgical Nursing III	4
PNSG 2240	Medical-Surgical Nursing IV	4
PNSG 2310	Medical-Surgical Nursing Clinical I	2
PNSG 2320	Medical-Surgical Nursing Clinical II	2
PNSG 2330	Medical-Surgical Nursing Clinical III	2
PNSG 2340	Medical-Surgical Nursing Clinical IV	2
PNSG 2250	Maternity Nursing	3
PNSG 2255	Maternity Nursing Clinical	1
PNSG 2410	Nursing Leadership	1
PNSG 2415	Nursing Leadership Clinical	2

#### Total Credit Hours: 60 Minimum Credit Hours for Graduation

#### **Graduation Requirements**

All courses in the nursing curriculum must be completed in order to graduate.

Only students who have completed required coursework and receive the diploma are eligible to sit for the NCLEX-PN examination. Students must demonstrate attainment of stated program competencies by achieving a predetermined score on the NLN and other diagnostic readiness tests. Students not achieving this score will be required to successfully complete remedial work prior to the completion of the program.

#### PRACTICAL NURSING (PN14) DIPLOMA

#### Not Accepting New Students Into This Program

## **Campus Availability:**

- Floyd County Campus
- Walker County Campus

## Program Description:

The Practical Nursing program is designed to prepare students to write the NCLEX-PN for licensure as practical nurses. The program prepares graduates to give competent nursing care. This is done through a selected number of academic and occupational courses providing a variety of techniques and materials necessary to assist the student in acquiring the needed knowledge and skills to give competent care. A variety of clinical experiences are planned so that theory and practice are integrated under the guidance of the clinical instructor. Program graduates receive a Practical Nursing diploma and have the qualifications of an entry-level practical nurse.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum. Every semester is a possible entrance semester for occupational curriculum at the Floyd County campus. Spring and fall semesters for occupational curriculum in the day program; fall semester, even years, in the night program, at the Walker County campus. Students will be accepted as they become eligible to progress to the occupational curriculum and according to class maximum for the semester.

## **Entrance Requirements:**

The Practical Nursing program gives students the knowledge, skills, and attitudes necessary to succeed in practical nursing. The program provides educational opportunities regardless of race, color, national origin, religion, sex, age, disability, academic disadvantage, or economic disadvantage. Program graduates are to be competent in communications, math, interpersonal relations, anatomy and physiology, drug calculations, administration of medications, nutrition and diet therapy, nursing ethics, patient care, and wellness and prevention of illness. The PN program strives to meet the health care needs of the community which it serves, working in conjunction with specific agencies that employ its graduates. The following guidelines have been established in considering applicants for admission to the PN program. They may be evaluated and revised as necessary by faculty and administration.

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs **Assessment Results:** If the placement test results indicate that the student is not academically prepared to enter the program, the student may be granted Learning Support or provisional admission status to the college and be placed in one or more Learning Support classes.

## Other:

- 1) Submit a student application for the PN program;
- 2) Submit two personal references;

3) Take the Nursing Psychological Services Bureau (PSB) entrance examination and score at least 40th percentile or above. If after a third attempt at the entrance examination you have not achieved a score of at least 40, you will need to make an appointment with your advisor;

4) Attend the PN program orientation after acceptance and prior to the first nursing course;

5) GPA of 3.0 on all core curriculum which includes all of the following: ENGL 1010, MATH 1012, PSYC 1010, and ALHS 1011.

Students transferring from other regionally accredited nursing programs may receive advance placement if:

1) The above requirements have been met;

2) Student was in good standing at his or her previous institution;

3) A personal reference from the nursing faculty of the previous institution has been submitted;

4) Nursing courses have been completed within two years prior to application;

5) Science courses have been completed within two years prior to application.

## **Retention Policies:**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next semester of the nursing program. In all nursing courses and PNSG 2010, students must attain a 75% unit test average. PNSG 2010 requires an 85% score on the drug calculation exam;

2) Students must attain an overall numerical grade of 70 or better in each nursing course, including clinical rotations, to progress in the program;

3) Students must maintain CPR certification and carry professional liability insurance while enrolled in nursing courses.

#### **Readmission Policies:**

1) All current admission requirements must be met before applying for readmission;

2) Students must continue to be in good standing with the college and the nursing program (i.e., no disciplinary or academic misconduct on record);

3) Unsuccessful students will be allowed only one readmission into the nursing course in which they were unsuccessful;

4) After an unsuccessful course, the student is required to wait at least one semester before re-entering that course;

5) After the second failure, the student will be dropped from the nursing program, and faculty will assist the student in selecting another career path.

**Program Final Exit Point:** Graduates from the Practical Nursing program are eligible to take the NCLEX-PN Exam for Georgia State Board to become a licensed practical nurse (LPN).

Pre-Occupa	tional Curriculum (19 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
PSYC 1010	Basic Psychology	3
ALHS 1011	Anatomy and Physiology	5
ALHS 1090	Medical Terminology for Allied Health Sciences	2
ALHS 1040	Introduction to Health Care	3

## PRACTICAL NURSING, (CONT.)

Occupation	al Curriculum (54 Credit Hours)	<b>Credit Hours</b>
PNSG 1020	Pharmacology for Clinical Calculations	2
PNSG 1030	Clinical Nutrition	2
PNSG 1100	Nursing Fundamentals	7
PNSG 1120	Medical Surgical Nursing I	7
PNSG 1122	Medical Surgical Nursing Practicum I	6
PNSG 1130	Medical Surgical Nursing II	7
PNSG 1132	Medical Surgical Nursing Practicum II	6
PNSG 2120	Pediatric Nursing	4
PNSG 2122	Pediatric Nursing Practicum	1
PNSG 2130	Obstetric Nursing	4
PNSG 2132	Obstetric Nursing Practicum	2
PNSG 2150	Nursing Leadership	1
PNSG 2152	Nursing Leadership Practicum	2
COMP 1000	Introduction to Computers	3

#### **Total Credit Hours: 73 Minimum Credit Hours for Graduation**

## **Graduation Requirements**

All courses in the nursing curriculum must be completed in order to graduate. Only students who have completed required coursework and receive the diploma are eligible to sit for the NCLEX-PN examination. Students must demonstrate attainment of stated program competencies by achieving a predetermined score on the NLN and other diagnostic readiness tests. Students not achieving this score will be required to successfully complete remedial work prior to the completion of the program.

#### SURGICAL TECHNOLOGY (ST12) DIPLOMA

## **Campus Availability:**

Walker County Campus

## **Program Description:**

The Surgical Technology, Diploma program prepares students for employment in a variety of positions in the surgical field. The Surgical Technology, Diploma program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in Surgical Technology. Graduates of the program receive a Surgical Technology diploma and are qualified for employment as surgical technologists.

**Entrance Dates:** Beginning of any semester for pre-occupational curriculum and winter semester for occupational curriculum.

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into occupational program curriculum

## Other:

1) Completion of application and related procedures;

2) Achieve a score of 30th percentile on the Psychological Services Bureau, Inc. (PSB) entrance exam. If, after the third attempt on the entrance examination you have not received a score of at least 30, you will need to make an appointment with your advisor;

- 3) Submission of an autobiography;
- 4) Documentation of a physical examination and immunization records;
- 5) Ability to comply with health related standards and meet essential skill requirements;
- 6) Liability insurance payment;
- 7) CPR certification;
- 8) Background Check

## **Retention Policies:**

1) Students must maintain a GPA of 2.0 or better. A "C" must be achieved in each course in order to progress to the next semester of the program;

2) Students must attain a numerical grade of 70 or better in each Surgical

Technology lecture course and 80 in clinical rotations to progress in the program;

3) A student must maintain CPR certification and carry professional liability insurance while enrolled in Surgical Technology courses.

**Program Final Exit Point:** Program graduates will be eligible to sit for the certified surgical technologist examination.

# SURGICAL TECHNOLOGY, (CONT.)

Pre-Occupa	<b>Credit Hours</b>	
ENGL 1010	Fundamentals of English I	3
MATH 1012	Fundamentals of Mathematics	3
ALHS 1011	Anatomy and Physiology	5
COMP 1000	Introduction to Computers	3
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
Occupation	al Curriculum (43 Credit Hours)	Credit Hours
	al Curriculum (43 Credit Hours) Introduction to Surgical Technology	Credit Hours
Occupation SURG 1010 SURG 1020	<b>al Curriculum (43 Credit Hours)</b> Introduction to Surgical Technology Principles of Surgical Technology	Credit Hours 6 5
SURG 1010	Introduction to Surgical Technology	6
SURG 1010 SURG 1020	Introduction to Surgical Technology Principles of Surgical Technology	6 5
SURG 1010 SURG 1020 SURG 1080	Introduction to Surgical Technology Principles of Surgical Technology Surgical Microbiology	6 5 2
SURG 1010 SURG 1020 SURG 1080 SURG 1100	Introduction to Surgical Technology Principles of Surgical Technology Surgical Microbiology Surgical Pharmacology	6 5 2 2
SURG 1010 SURG 1020 SURG 1080 SURG 1100 SURG 1120	Introduction to Surgical Technology Principles of Surgical Technology Surgical Microbiology Surgical Pharmacology Introductory Surgical Practicum I	6 5 2 2 3

SURG 2120	Specialty Surgical Practicum I	3
SURG 2130	Specialty Surgical Practicum II	3
SURG 2040	Surgical Procedures II	4
SURG 2140	Advanced Specialty Surgical Practicum I	3
SURG 2150	Advanced Specialty Surgical Practicum II	3
SURG 2240	Seminar in Surgical Technology	2

## **Total Credit Hours: 62 Minimum Credit Hours for Graduation**

## ADVANCED EMERGENCY MEDICAL TECHNICIAN (AEMT) (EMH1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Advanced Emergency Medical Technician certificate program prepares students to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

**Entrance Date:** Any term for Pre-occupational courses. Fall Semester for occupational courses, and as needed.

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs

#### Other:

1)Criminal background checks are required based on the requirements for participation in clinical experiences.

2) Hold a valid driver's license.

3) Have successfully completed the new EMT (EMJ1) curriculum

4) Complete EMT program application.

5) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Note:** EMS students are required to purchase liability insurance. Current cost is \$46.00.

**Note:** Students will be required to purchase mandatory uniform and minimal supplies for the EMS program.

**Program Final Exit point:** EMT-B graduates are currently not qualified to work on an ambulance in this region. Graduates are eligible and required to apply for the National Registry Practical and written examinations prior to entry into the AEMT program. AEMT graduates are required to have certification as an EMT-B, EMT-I-85, or EMT I-99 prior to being allowed to take the AEMT practical and written examinations. Graduates are eligible to apply for the Advanced EMT National Registry Examination, and for entry into the Paramedicine diploma program after completion of pre-occupational courses or employment. Graduates are also eligible to apply for state licensure (with appropriate requirements) and employment as an Advanced EMT.

# ADVANCED EMERGENCY MEDICAL TECHNICIAN (AEMT), (CONT.)

Required Curriculum (10 Credit Hours)		<b>Credit Hours</b>
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical and Practical Applications for the AEMT	3

## Total Credit Hours: 10 Minimum Credit Hours for Graduation

#### CENTRAL STERILE SUPPLY PROCESSING TECHNICIAN- ADV (CS91) CERTIFICATE

#### **Campus Availability:**

• Walker County Campus

#### **Program Description:**

The Central Sterile Processing Technician Technical Certificate of Credit is designed to provide entry-level training that will prepare graduates to function in the sterile supply processing and distribution areas of healthcare facilities. The program is based on theory and clinical instruction that will apply scientific principles to the specific work area. Theory classes with laboratory participatory classes will prepare students for clinical application of skills and knowledge in healthcare facilities. Together with practical experiences provide students with the preparation necessary to be eligible to sit for the International Association of Healthcare Central Service Material Management (IAHCSMM) certification exam.

**Program Objectives:** 1) Students will develop skills necessary to properly decontaminate process, prepare, store, and issue both sterile and non-sterile medical and surgical supplies and equipment in the healthcare setting; 2) Students will be prepared to operate and monitor sterilizers in healthcare facilities.

Entrance Date: Beginning of winter semester

#### **Entrance Requirements:**

Age: Minimum of 17 years of age

Required Courses (23 Credit Hours)		<b>Credit Hours</b>
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
CSSP 1010	Central Sterile Processing Technician	5
CSSP 1020	Central Sterile Processing Technician Practicum	11
EMPL 1000	Interpersonal Relations and Professional Development	2

#### Total Credit Hours: 23 Minimum Credit Hours for Graduation

#### EMERGENCY MEDICAL RESPONDER (EMR) (EB71) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

#### Program Description:

The Emergency Medical Responder certificate program prepares students to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. Emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder (EMR) technical certificate of credit provides students with the opportunity to prepare for entry-level into the emergency medical services professions for possible employment in a variety of prehospital, industrial and first responder settings. After successful completion of a SOEMST approved EMR program the graduate may apply to take the National Registry of Emergency Medical Technicians EMR certification examination.

Entrance Date: Fall Semester, and as needed

#### **Entrance Requirements:**

Age: Minimum of 16 years of age

**Education:** HS Diploma or GED is not required to complete this program, but may be required for National Registry certification.

#### Other:

1) Complete EMR program application.

2) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Program Final Exit point:** Graduates will be awarded a certificate after the completion of all required courses.

Required Courses (11 Credit Hours)		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1090	Medical Terminology for Allied Health Sciences	2
EMSP 1010	Emergency Medical Responder	4

#### Total Credit Hours: 11 Minimum Credit Hours for Graduation

## EMERGENCY MEDICAL TECHNICIAN (EMT) (EMJ1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## Program Description:

The Emergency Medical Technician certificate program prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system.

Entrance Date: Fall Semester, and as needed

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs

## **Other:**

1)Criminal background checks are required based on the requirements for participation in clinical experiences.

2) Hold a valid driver's license.

3) Complete EMS program application.

4) Be physically able to perform the duties of an EMS student as verified by a note from a physician.

**Note:** If you are pregnant or become pregnant, and wish to enter or remain in the EMS program, you must present a doctor's release that states that the requirements of the EMS program will not endanger your health or the health of the baby.

**Note:** EMS students are required to purchase liability insurance. Current cost is \$46.00.

**Note:** Students will be required to purchase mandatory uniform and minimal supplies for the EMS program.

**Program Final Exit Point:** EMT-B graduates are currently not qualified to work on an ambulance in this region. Graduates are eligible and required to apply for the National Registry Practical and written examinations prior to entry into the AEMT program. AEMT graduates are required to have certification as an EMT-B, EMT-I-85, or EMT I-99 prior to being allowed to take the AEMT practical and written examinations.

## **Required Courses (16 Credit Hours)**

#### Credit Hours

EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	EMT Assessment/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock and Trauma for the EMT	3
EMSP 1160	Clinical and Practical Applications for the EMT	1

#### Total Credit Hours: 16 Minimum Credit Hours for Graduation

## HEALTH CARE ASSISTANT (HA21) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

(Note: Some classes may only be available on Floyd, Gordon and Walker County Campuses)

#### **Program Description:**

The Health Care Assistant Certificate of Credit is a program that provides academic foundations at the diploma level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

#### Entrance Date: Varies

#### **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum 18 years old for entrance into Nursing and Allied Health Technology programs

**Program Final Exit Point:** Upon completion of the Healthcare Assistant program graduates will be prepared for entry level employment in one of four healthcare fields: Certified Nursing Assistant, Phlebotomy Technician, Medical Coding, or Medical Receptionist.

Pre-Occupational Curriculum (22 Credit Hours)		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1040	Introduction to Health Care	3
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
ENGL 1010	Fundamentals of English I	3
PSYC 1010	Basic Psychology	3
MATH 1012	Foundations of Mathematics	3
or		
MATH 1013	Algebraic Concepts	(3)

# And completion of ONE of the following sets of occupational curriculum for a specialization:

Certified Nursing Assistant Specialty(14 Credit Hours)		<b>Credit Hours</b>
NAST 1100	Nurse Aide Fundamentals	6
ALHS 1060	Diet and Nutrition for Allied Sciences	2
XXXX xxxx	Occupationally related electives (See advisor for recommended list)	6

#### or

## HEALTH CARE ASSISTANT (CONT.)

Phlebotomy Specialty (14 Credit Hours)		<b>Credit Hours</b>
PHLT 1030	Introduction to Venipuncture	3
PHLT 1050	Clinical Practice	5
XXXX xxxx	Occupational Related Electives	6
	(See advisor for recommended list)	
or		

## **Office Specialty (14 Credit Hours)**

Office Specialty (14 Credit Hours)		Credit Hours
BUSN 1440	Document Production	4
BUSN 1240	Office Procedures	3
BUSN 2340	Medical Administrative Procedures	4
XXXX xxxx	Occupational Related Elective	3
	(See advisor for recommended list)	

or

## Medical Coding Specialty (14 Credit Hours)

## **Credit Hours**

(Floyd County	Campus only)	
BUSN 1440	Document Production	4
MAST 1120	Human Pathological Conditions in the Medical Office	3
MAST 1510	Medical Billing and Coding I	2
MAST 1520	Medical Billing and Coding II	3
MAST 1530	Medical Procedural Coding	2

## **Total Credit Hours: 36 Minimum Credit Hours for Graduation**

## HEALTH CARE SCIENCE (HS21) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

(Note: Some classes may only be available on the Floyd and Walker County Campuses)

#### **Program Description:**

The Health Care Science Certificate of Credit is a program that provides academic foundations at the degree level in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of Health Care delivery and are well prepared for employment and subsequent upward mobility.

#### **Entrance Requirements:**

Age: 17 years old for admission into pre-occupational classes

18 years old for admission into Nursing and Allied Health Technology programs

Pre-Occupational Curriculum (12 Credit Hours)* Credit Hours			
ENGL 1101	Composition and Rhetoric	3	
PSYC 1101	Introductory Psychology	3	
XXXX xxxx	Humanities/Fine Arts	3 3	
MATH xxxx	See Program Specific Requirements	3	
General Core Science (12 Credit Hours) Credit Hour			
XXXX xxxx	See Program Specific Requirements	12	
General Occupational Courses (5 Credit Hours) Credit Hours			
ALHS 1040	Introduction to Health Care	3	
ALHS 1090	Medical Terminology for Allied Health Sciences	2	
And completion of ONE of the following sets of occupational curriculum for a			
specialization (8 Credit Hours):			
Certified Nursing Assistant Speciality Credit Hours			
NAST 1100	Nurse Aide Fundamentals	6	
ALHS 1060	Diet and Nutrition for Allied Sciences	2	
Phlebotomy Specialty Credit Hours			
PHLT 1030		3	
PHLT 1050	•	5	

#### Total Credit Hours: 36 Minimum Credit Hours for Graduation

#### PATIENT CARE ASSISTANT (PC21) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus

## **Program Description:**

The Patient Care Assistant Technical Certificate of Credit prepares students with rigorous classroom training and practice as well as the clinical experiences to perform a full range of patient care duties or services under nursing or medical direction. This includes taking vital signs, obtaining lab specimens, assisting with activities of daily living, observing and charting patient information, and reporting appropriate information to supervisors. It may also include providing various outreach services to clients within the community. Students who successfully complete the Patient Care Assistant Technical Certificate of Credit may be eligible to sit for the National Nurse Aide Assessment program (NNAAP) which determines competency to become enrolled in the State nurse aide registry.

## **Entrance Date: Varies**

## **Entrance Requirements:**

Age: 17 years old for entrance into pre-occupational curriculum

18 years old for entrance into Nursing and Allied Health Technology programs **Education:** High school diploma or GED<sup>®</sup> is not required.

**Program Final Exit Point:** Graduates will be able to apply to sit for Georgia's Certified Nursing Assistant (CNA) examination.

Required Courses (23 Credit Hours)		<b>Credit Hours</b>
ALHS 1011	Anatomy and Physiology	5
ALHS 1040	Introduction to Health Care	3
ALHS 1060	Diet and Nutrition for Allied Health Sciences	2
ALHS 1090	Medical Terminology for Allied Health Sciences	2
COMP 1000	Introduction to Computers	3
EMPL 1000	Interpersonal Relations and Professional Development	2
NAST 1100	Nurse Aide Fundamentals	6

Total Credit Hours: 23 Minimum Credit Hours for Graduation

# **Industrial Technologies**

Rapid advancements in the industrial technology fields make the need for current education and training essential. Georgia Northwestern Technical College (GNTC) Industrial Technologies programs combine classroom study and practical training emphasizing skill development, related technical knowledge, and general education. GNTC offers a wide selection of degrees, diplomas, and certificates. These programs are offered on both a full-time and part-time basis, although part-time enrollment will require longer to complete. All programs are not offered on every college campus. As with all GNTC programs, students interested in Industrial Technologies programs should consult specific program information in this catalog and call or visit the Student Success Center to discuss program admission requirements and entry dates. The following is a list of the Industrial Technologies degrees, diplomas, and certificates that GNTC offers. GNTC reserves the right to cancel courses due to inadequate enrollment. The letters following the program names identify the campuses or location where the programs are taught: (A-Aviation Training Center, Floyd County; F-Floyd County Campus; G-Gordon County Campus; P-Polk County Campus; R-Richardson Road, Gordon County; W-Walker County Campus; and WM-Whitfield Murray Campus).

## Associate of Applied Science Degree Programs

Automotive Technology (AT23) - F, W Aviation Maintenance Technology (AM43) - A Construction Management (CM13) - G Drafting Technology (DT13) - F, W (Not Accepting New Students on the Floyd Campus) Electronics Technology (ET13) - W, WM Industrial Systems Technology (IS13) - W, WM Instrumentation and Controls Technician (IA13) - F, P, W

## Diploma Programs

Air Conditioning Technology (ACT2) - F, W Auto Collision Repair (ACR2) - F Automotive Fundamentals (AF12) - F, W Aviation Maintenance Technology (AM34) - A Avionics Maintenance Technology (AM44) - A Carpentry (CA22) - F (Not Accepting New Students Into This Program) CNC Technology (CT12) - F, W Construction Management (CM12) - G Drafting Technology (DT12) - F, W (Not Accepting New Students on the Floyd Campus) Electrical Control Systems (EC22) - F, W Electrical Systems Technology (ES12) - F Electronics Fundamentals (EF12) - W Electronics Technology (ET14) - F, W, WM (Not Accepting New Students on the Floyd Campus) Horticulture (EH12) - F Industrial Mechanical Systems (IMS2) - F (Not Accepting New Students Into This Program) Industrial Systems Technology (IST4) - F, W, WM Machine Tool Technology (MTT2) - F Welding and Joining Technology (WAJ2) - F, W

## **Certificate Programs**

Advanced PLC and HMI Technician I (AP21) - F Advanced PLC and HMI Technology II (AP31) - F Advanced Shielded Metal Arc Welder (OSM1) - F, W Automotive Chassis Technician Specialist (ASG1) - F, W Automotive Climate Control Technician (AH21) - F, W Automotive Collision Repair Assistant I (AB51) - F Auto Electrical/Electronic Systems Technician (AE41) - F, W Automotive Engine Performance Technician (AE51) - F, W Automotive Engine Repair Technician (AE61) - F, W Automotive Refinishing Assistant II (AP71) - F Automotive Transmission/Transaxle Tech Specialist (AA71) - F, W Aviation Maintenance Technician (AM24) - A Aviation Maintenance Technician-Airframe (AMT1) - A Aviation Maintenance Technician-Power Plant (AM61) - A Avionics Bench Technician (AB81) - A Basic Machinist (BM31) - F, W Basic Shielded Metal ARC Welder (FS31) - F, W Cabinetmaking Assembly Technician (CA11) - F (Not Accepting New Students Into This Program) Cabinetmaking Installation Technician (CI11) - F (Not Accepting New Students Into This Program) CAD Operator Mechanical (CP61) - F, W (Not Accepting New Students on the Floyd Campus) Certified Construction Worker (CCW1) - F CNC Specialist (CS51) - F, W Commercial Truck Driving (CT61) - G, W Construction Management Apprentice (CM71) - G Electrical Maintenance Technician (EM81) F, P (Not Accepting New Students Into This Program) Electrical Technician (ET51) - F, WM Gas Metal ARC Welder (GM31) - F, W Gas Tungsten ARC Welder (GTA1) - W Industrial Electrician (IE41) - F, W, WM Industrial Fluid Power Technician (IF11) - F, W Industrial Motor Control Technician (IM41) - F, W Industrial Systems Fundamentals (IS61) - W Instrumentation and Controls Technician I (IA31) - F, P, W Instrumentation and Controls Technician II (IA41) - F, P, W Lathe Operator (LP11) - F Mechanical Maintenance Technician (MM31) - F, P Mill Operator (MP11) - F Process Control Technician I (PC61) - W Programmable Control Technician I (PC81) - F, W, WM Programmable Control Technician II (PC91) - W Robotic Technician (RT41) - F, W Vertical Shielded Metal Arc Welder Fabricator (VSM1) - F, W

Program lengths vary based on program type and number of hours taken each semester.

Occupational courses alone (excluding COMP 1000) take two-years to complete in

the Aviation Maintenance Technology Degree and Diploma and Aviation Maintenance Technician Certificate majors.

# Industrial Technology Program Accreditations

The Automotive Technology program is Automotive Service Excellence (ASE) certified.

The Aviation Maintenance Technology program (AVMT courses only) are regulated and certificated by the Federal Aviation Administration.

#### AUTOMOTIVE TECHNOLOGY (AT23) ASSOCIATE OF APPLIED SCIENCE DEGREE

# **Campus Availability:**

- Floyd County Campus
- Walker County Campus

# **Program Description:**

The Automotive Technology Associates Degree program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Auto Technology Associates degree that qualifies them as entry-level technicians.

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester)

General Edu	ucation Core (15 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3

Occupation	al Curriculum (47 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Automotive Suspension and Steering Systems	4
AUTT 1060	Automotive Climate Control Systems	5
AUTT 2010	Automotive Engine Repair	6
AUTT 2020	Automotive Manual Drive Train and Axles	4
AUTT 2030	Automotive Automatic Transmissions and Transaxles	5

#### **Total Credit Hours: 62 Minimum Credit Hours for Graduation**

\* To view General Education Core Courses refer to page 79

#### AVIATION MAINTENANCE TECHNOLOGY (AM43) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

#### **Program Description:**

The Aviation Maintenance Technology degree program is intended to provide students with an introduction to the occupational area of aviation maintenance as currently understood and practiced by the Federal Aviation Administration (FAA) Mechanic Certificate holders with Airframe and/or Powerplant ratings. In addition, the combined Powerplant and Airframe curriculum is designed to provide students with the technical knowledge and skills required to diagnose problems and repair aircraft Powerplants, both reciprocating and turbine, their systems and components; and airframes, both metal and wood, their systems and components. Satisfactory completion of all program courses entitles students to participate in FAA Powerplant and Airframe examinations and certification processes.

The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

**Entrance Dates:** Fall Semester (Pre-Occupational Courses Any Semester)

General Edu	ication Core (15 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3
Occupation	al Curriculum (87 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	5
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
AVMT 2010	Aircraft Airframe Structures	2
AVMT 2020	Airframe Sheet metal and Non-Metallic Structures	5
AVMT 2030	Airframe Welding	1
AVMT 2040	Airframe Assembly and Rigging	2
AVMT 2050	Airframe Inspection	4
AVMT 2060	Aircraft Hydraulic and Pneumatic Systems	2
AVMT 2070	Aircraft Landing Gear Systems	3
AVMT 2080	Aircraft Environmental Control Systems	3 3 3
AVMT 2085 (Program requir	Aircraft Fuel and Instrument Systems ements continued on following page)	3

# AVIATION MAINTENANCE TECHNOLOGY (CONT.)

Occupationa	al Curriculum (Cont.)	<b>Credit Hours</b>
AVMT 2090	Aircraft Electrical Systems	4
AVMT 2095	Aircraft Communication and Navigation Systems	2
AVMT 2210	Reciprocating Engine Powerplants I	3
AVMT 2220	Reciprocating Engine Powerplants II	5
AVMT 2230	Gas Turbine Powerplants I	3
AVMT 2240	Gas Turbine Powerplants II	3
AVMT 2250	Aircraft Engine Inspection	1
AVMT 2260	Aircraft Engine Fuel and Fuel Metering Systems	5
AVMT 2270	Powerplant Instruments, Fire Protection and Electrical System	stems 3
AVMT 2275	Powerplant Ignition and Starting Systems	4
AVMT 2280	Aircraft Powerplant Accessory Systems	3
AVMT 2285	Aircraft Propeller Systems	3

**Total Credit Hours: 102 Minimum Credit Hours for Graduation** 

\* To view General Education Core Courses refer to page 79

#### CONSTRUCTION MANAGEMENT (CM13) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Construction Management degree program is designed to prepare students for a career in some aspect of construction supervision. Basic carpentry skills include laying footings and foundations, framing, roofing, and interior and exterior finishing. Management skills include principles of accounting, construction drafting, code review, scheduling, and contracting. Program graduates receive an Associate of Applied Science Degree in Construction Management.

General Edu	ucation Core (15 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3

Occupation	al Curriculum (57 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ACCT 1100	Financial Accounting I	4
CARP 1070	Site Layout, Footings and Foundations	3
CARP 1105	Floor and Wall framing	4
CARP 1110	Ceiling and Roof Framing	6
CARP 1112	Exterior Finishes and Trim	4
CARP 1114	Interior Finishers I	5
CMTT 2010	Residential Estimating Review	3
CMTT 2020	Construction Drafting I	3
CMTT 2050	Residential Code Review	3
CMTT 2130	Computerized Construction Scheduling	3
CMTT 2170	Construction Contracting	4
COFC 1000	Safety	2
COFC 1010	Introduction to Construction	2
COFC 1020	Professional Tool Use and Safety	3
COFC 1030	Materials and Fasteners	2
COFC 1050	Construction Print Reading Fundamentals	3

#### **Total Credit Hours: 72 Minimum Credit Hours for Graduation**

\*To view General Education Core Courses refer to page 79

#### DRAFTING TECHNOLOGY (DT13) ASSOCIATE OF APPLIED SCIENCE DEGREE

# **Campus Availability:**

• Floyd County Campus (Not Accepting New Students On the Floyd Campus)

• Walker County Campus

# **Program Description:**

The Drafting Technology Associate of Applied Science degree program prepares students for employment in a variety of positions in the drafting field, such as drafter or CAD operator based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or retrain in drafting practices and software.

Entrance Dates: Fall Semester (Pre-Occupational Courses Any Semester)

General Edu	ucation Core (15 Credit Hours)*	Credit Hours
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3 3 3 3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
or MATH 1113	Progeleulus	(2)
MAIN 1113	Precalculus	(3)
Occupation	al Curriculum (11 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
DFTG 1101	CAD Fundamentals	4
DFTG 1103	Technical Drawing I	4
Choose One	e of the Following Specializations	
Mechanical	Drafting Specialization (34 Credit Hours)	<b>Credit Hours</b>
DFTG 1105	3D Mechanical Modeling	4
2	bb Hiedhaniedi Hiedennig	
DFTG 1107	Technical Drawing II	3
	Technical Drawing II Technical Drawing III	3 4
DFTG 1107 DFTG 1109 DFTG 1111	Technical Drawing II Technical Drawing III Technical Drawing IV	3 4 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V	3 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b>	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b>	3 4 4 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V a Minimum of 15 Credits from the Following Engineering Graphics	3 4 4 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V a Minimum of 15 Credits from the Following Engineering Graphics Blueprint Reading for Technical Drawing I	3 4 4 4 4 2
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship	3 4 4 4 4 2 3
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship	3 4 4 4 4 2 3 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2500	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review	3 4 4 4 2 3 4 3
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2500 DFTG 2600	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship	3 4 4 4 2 3 4 3 6
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2500 DFTG 2600 DFTG 2020	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship Visualization and Graphics	3 4 4 4 2 3 4 3 6 3
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2400 DFTG 2600 DFTG 2600 DFTG 2020 DFTG 2030	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship Visualization and Graphics Advanced 3D Modeling Architectural	3 4 4 4 2 3 4 3 6 3 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2400 DFTG 2600 DFTG 2020 DFTG 2030 DFTG 2040	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship Visualization and Graphics Advanced 3D Modeling Architectural Advanced 3D Modeling Mechanical	3 4 4 4 2 3 4 3 6 3 4 4 4
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2400 DFTG 2600 DFTG 2020 DFTG 2030 DFTG 2040 DFTG 2120	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship Visualization and Graphics Advanced 3D Modeling Architectural Advanced 3D Modeling Mechanical Print Reading for Architecture	3 4 4 4 2 3 4 3 6 3 4 4 3 3
DFTG 1107 DFTG 1109 DFTG 1111 DFTG 1113 <b>Choose</b> DFTG 2010 DFTG 2110 DFTG 2300 DFTG 2400 DFTG 2400 DFTG 2600 DFTG 2020 DFTG 2030 DFTG 2040	Technical Drawing II Technical Drawing III Technical Drawing IV Technical Drawing V <b>a Minimum of 15 Credits from the Following</b> Engineering Graphics Blueprint Reading for Technical Drawing I Drafting Technology Practicum/Internship Drafting Technology Practicum/Internship Drafting Technology Exit Review Drafting Technology Practicum/Internship Visualization and Graphics Advanced 3D Modeling Architectural Advanced 3D Modeling Mechanical	3 4 4 4 2 3 4 3 6 3 4 4 4

(Program requirements continued on following page)

# DRAFTING TECHNOLOGY, (CONT.)

Architectur	al Drafting Specialization (34 Credit Hours)	<b>Credit Hours</b>
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
DFTG 1133	Commercial Drawing I	4
Choose	a Minimum of 14 Credits from the Following	
DFTG 2010	Engineering Graphics	4
DFTG 2110	Blueprint Reading for Technical Drawing I	2
DFTG 2300	Drafting Technology Practicum/Internship	3
DFTG 2400	Drafting Technology Practicum/Internship	4
DFTG 2500	Drafting Technology Exit Review	3
DFTG 2600	Drafting Technology Practicum/Internship	6
DFTG 2020	Visualization and Graphics	3
DFTG 2030	Advanced 3D Modeling Architectural	4
DFTG 2040	Advanced 3D Modeling Mechanical	4
DFTG 2120	Print Reading for Architecture	3
DFTG 2130	Manual Drafting Fundamentals	2
DFTG 2210	Blueprint Reading for Technical Drawing II	2

# **Total Credit Hours: 60 Minimum Credit Hours Required for Graduation**

\*To view General Education Core Courses refer to page 79

### ELECTRONICS TECHNOLOGY (ET13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Electronics Technology Degree program is a sequence of courses designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Associate of Science Degree which qualifies them as electronics technicians with a specialization in industrial electronics.

**Entrance Dates:** Fall Semester (Pre-Occupational Courses Any Semester)

General Edu	cation Core (15 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1111	College Algebra	3
MATH 1112	College Trigonometry	3
or		
MATH 1113	Precalculus	(3)
Occupation	al Curriculum (29 Credit Hours)	<b>Credit Hours</b>
Occupation COMP 1000	al Curriculum (29 Credit Hours) Introduction to Computers	Credit Hours
	• •	
COMP 1000	Introduction to Computers	3
COMP 1000 ELCR 1005	Introduction to Computers Soldering Technology	3 1
COMP 1000 ELCR 1005 ELCR 1010	Introduction to Computers Soldering Technology Direct Current Circuits	3 1 5 7 5
COMP 1000 ELCR 1005 ELCR 1010 ELCR 1020	Introduction to Computers Soldering Technology Direct Current Circuits Alternating Current Circuits	3 1 5 7

#### And completion of the following specialization:

Industrial E	lectronics Technology Specialization (16 Credit Hours)	
ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors and Robotics	3

#### **Total Credit Hours: 60 Minimum Credit Hours for Graduation**

\*To view General Education Core Courses refer to page 79

GNTC

#### INDUSTRIAL SYSTEMS TECHNOLOGY (IS13) ASSOCIATE OF APPLIED SCIENCE DEGREE

#### **Campus Availability:**

- Walker County Campus
- Whitfield Murray Campus

#### **Program Description:**

The Industrial Systems Technology Degree program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The Degree program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, plc's, instrumentation, fluid power, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems technology Degree that qualifies them for employment as industrial electricians or industrial systems technicians.

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester)

General Edu	cation Core (15 Credit Hours)*	Credit Hours
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3
0		
Occupation	al Curriculum (52 Credit Hours)	Credit Hours
COMP 1000		<u>Credit Hours</u> 3
	Introduction to Computers Basic Circuit Analysis	
COMP 1000	Introduction to Computers	3
COMP 1000 IDSY 1100	Introduction to Computers Basic Circuit Analysis	3 5
COMP 1000 IDSY 1100 IDSY 1170	Introduction to Computers Basic Circuit Analysis Industrial Mechanics	3 5 6
COMP 1000 IDSY 1100 IDSY 1170 IDSY 1110	Introduction to Computers Basic Circuit Analysis Industrial Mechanics Industrial Motor Controls I	3 5 6 5
COMP 1000 IDSY 1100 IDSY 1170 IDSY 1110 IDSY 1120	Introduction to Computers Basic Circuit Analysis Industrial Mechanics Industrial Motor Controls I Basic Industrial PLC's	3 5 6 5 6
COMP 1000 IDSY 1100 IDSY 1170 IDSY 1110 IDSY 1120 IDSY 1130	Introduction to Computers Basic Circuit Analysis Industrial Mechanics Industrial Motor Controls I Basic Industrial PLC's Industrial Wiring	3 5 6 5 6 4
COMP 1000 IDSY 1100 IDSY 1170 IDSY 1110 IDSY 1120 IDSY 1130 IDSY 1190	Introduction to Computers Basic Circuit Analysis Industrial Mechanics Industrial Motor Controls I Basic Industrial PLC's Industrial Wiring Fluid Power and Piping Systems	3 5 6 5 6 4 6
COMP 1000 IDSY 1100 IDSY 1170 IDSY 1110 IDSY 1120 IDSY 1130 IDSY 1190 IDSY 1210	Introduction to Computers Basic Circuit Analysis Industrial Mechanics Industrial Motor Controls I Basic Industrial PLC's Industrial Wiring Fluid Power and Piping Systems Industrial Motor Controls II	3 5 6 5 6 4 6 5

#### Total Credit Hours: 67 Minimum Credit Hours for Graduation

\*To view General Education Core Courses refer to page 79

### INSTRUMENTATION AND CONTROLS TECHNICIAN (IA13) ASSOCIATE OF APPLIED SCIENCE DEGREE

# **Campus Availability:**

- Floyd County Campus
- Polk County Campus
- Walker County Campus

# **Program Description:**

The Instrumentation and Controls Technician Associate of Applied Science Degree provides students with a basic knowledge of instrumentation and control maintenance functions such as troubleshooting, repair, and installation of instruments, control devices, and electronic equipment. Instruction is performed through a combination of theory and hands-on training.

Pre-Occupa	tional Curriculum (19 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Social/Behavioral Sciences Elective	3
MATH 1101	Mathematical Modeling	3
or		
MATH 1111	College Algebra	(3)
PHYS 1110	Conceptual Physics	3
PHYS 1110L	Conceptual Physics Lab	1 3
HUMN 1101	Introduction to Humanities	3
or		
ARTS 1101	Art Appreciation	(3)
COMP 1000	Introduction to Computers	3
		<b>a 1</b> 1.11
	al Curriculum (57 Credit Hours)	Credit Hours
IDSY 1100	Basic Circuit Analysis	5
IDSY 1100 IDSY 1110	Basic Circuit Analysis Industrial Motor Controls I	5 5
IDSY 1100	Basic Circuit Analysis Industrial Motor Controls I	5 5 6
IDSY 1100 IDSY 1110	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's	5 5 6 5
IDSY 1100 IDSY 1110 IDSY 1120	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's	5 5 6 5 4
IDSY 1100 IDSY 1110 IDSY 1120 IDSY 1210	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's Industrial Motor Controls II	5 5 6 5
IDSY 1100 IDSY 1110 IDSY 1120 IDSY 1210 IDSY 2750	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's Industrial Motor Controls II Human Machine Interface	5 5 6 5 4 6 4
IDSY 1100 IDSY 1110 IDSY 1120 IDSY 1210 IDSY 2750 IDSY 1230	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's Industrial Motor Controls II Human Machine Interface Industrial Instrumentation	5 5 6 5 4 6 4 5
IDSY 1100 IDSY 1110 IDSY 1120 IDSY 1210 IDSY 2750 IDSY 1230 IDSY 2850	Basic Circuit Analysis Industrial Motor Controls I Basic Industrial PLC's Industrial Motor Controls II Human Machine Interface Industrial Instrumentation Industrial Graphical Communication	5 5 6 5 4 6 4

# ICET 2080 Final Control Elements

IDSY 2830 Networking Industrial Equipment

# Total Credit Hours: 76 Minimum Credit Hours for Graduation

\*To view General Education Core Courses refer to page 79

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4

# AIR CONDITIONING TECHNOLOGY (ACT2) DIPLOMA

# **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### **Program Description:**

The Air Conditioning Technology Diploma program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology Diploma and have the qualification of an air conditioning technician.

Entrance Dates: Fall Semester (Pre-Occupational Courses Any Semester)

Basic Skills Courses (8 Credit Hours)		<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (43 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AIRC 1005	Refrigeration Fundamentals	4
AIRC 1010	Refrigeration Principles and Practices	4
AIRC 1020	Refrigeration Systems Components	4
AIRC 1030	HVACR Electrical Fundamentals	4
AIRC 1040	HVACR Electrical Motors	4
AIRC 1050	HVACR Electrical Components and Controls	4
AIRC 1060	Air Conditioning Systems Application and Installation	4
AIRC 1070	Gas heat	4
AIRC 1080	Heat Pumps and Related Systems	4
AIRC 1090	Troubleshooting Air Conditioning Systems	4

#### **Total Credit Hours: 51 Minimum Credit Hours for Graduation**

#### AUTO COLLISION REPAIR (ACR2) DIPLOMA

# **Campus Availability:**

• Floyd County Campus

# **Program Description:**

The Automotive Collision Repair program is a sequence of courses designed to prepare students for careers in the automotive collision repair profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes either major automotive collision repair or automotive painting and refinishing depending on the specialization area a student chooses to complete. Program graduates receive an Automotive Collision Repair diploma, which qualifies them as major collision repair technicians or painting and refinishing technicians.

Entrance Dates: Fall and Spring Semester (Pre-Occupational Courses Any Semester)

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (24 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Automobile Component Repair and Replacement	4
ACRP 1010	Foundations of Collision Repair	5
ACRP 1015	Fundamentals of Automotive Welding	4
ACRP 1018	Mechanical and Electrical Systems	4
And comple	tion of one of the following specializations:	
Major Collis	ion Repair Specialization	<b>Credit Hours</b>
ACRP 2010	Major Collision Repair	5
ACRP 2015	Major Collision Replacements	5
ACRP 2019	Major Collision Repair Internship	3
Refinishing	Specialization	<b>Credit Hours</b>
ACRP 2000	Introduction to Refinishing	5
ACRP 2005		5

**Total Credit Hours: 45 Minimum Credit Hours for Graduation** 

Fundamentals of Refinishing II

**Refinishing Internship** 

3 3

ACRP 2008

ACRP 2009

#### AUTOMOTIVE FUNDAMENTALS (AF12) DIPLOMA

#### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### **Program Description:**

The Automotive Fundamentals diploma program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities enable students to develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive mechanics theory and practical application necessary for successful employment. Program graduates receive an Automotive Fundamentals diploma that qualifies them as entry-level technicians.

Entrance Dates: Fall and Spring Semester (Pre-Occupational Courses Any Semester)

Basic Skills Courses (8 Credit Hours)		<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupationa	al Curriculum (32 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1040	Automotive Engine Performance	7
AUTT 1050	Automotive Suspension and Steering Systems	4
AUTT 1060	Automotive Climate Control Systems	5

#### **Total Credit Hours: 40 Minimum Credit Hours for Graduation**

#### AVIATION MAINTENANCE TECHNOLOGY (AM34) DIPLOMA

# Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

### **Program Description:**

The Aviation Maintenance Technology diploma program is intended to provide students with an introduction to the occupational area of aviation maintenance as currently understood and practiced by the Federal Aviation Administration (FAA) Mechanic Certificate holders with Airframe and/or Powerplant ratings. In addition, the combined Powerplant and Airframe curriculum is designed to provide students with the technical knowledge and skills required to diagnose problems and repair aircraft Powerplants, both reciprocating and turbine, their systems and components; and airframes, both metal and wood, their systems and components. Satisfactory completion of all program courses entitles students to participate in FAA Powerplant and Airframe examinations and certification processes.

The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

**Entrance Dates:** Fall Semester (Pre-Occupational Courses Any Semester)

Basic Skills	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
Occupation	al Curriculum (87 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	2
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
AVMT 2010	Aircraft Airframe Structures	2
AVMT 2020	Airframe Sheet Metal and Non-Metallic Structures	5
AVMT 2030	5	1
AVMT 2040	Airframe Assembly and Rigging	2
AVMT 2050	Airframe Inspection	4
AVMT 2060	Aircraft Hydraulic and Pneumatic Systems	2
AVMT 2070	Aircraft Landing Gear Systems	3
AVMT 2080	Aircraft Environmental Control Systems	3 3
AVMT 2085	Aircraft Fuel and Instrument Systems	
AVMT 2090	Aircraft Electrical Systems	4
AVMT 2095	Aircraft Communication and Navigation Systems	2
AVMT 2210	Reciprocating Engine Powerplants I	3
AVMT 2220	Reciprocating Engine Powerplants II	5
(Program rec	uirements continued on following page)	

AVIATION MAINTENANCE TECHNOLOGY (CONT.)			
		Credit Hours	
AVMT 2230	Gas Turbine Powerplants I	3	
AVMT 2240	Gas Turbine Powerplants II	3	
AVMT 2250	Aircraft Engine Inspection	1	
AVMT 2260	Aircraft Engine Fuel and Fuel Metering Systems	5	
AVMT 2270	Powerplant Instruments, Fire Protection and Electrical Sy	stems 3	
AVMT 2275	Powerplant Ignition and Starting Systems	4	
AVMT 2280	Aircraft Powerplant Accessory Systems	3	
AVMT 2285	Aircraft Propeller Systems	3	

#### **Total Credit Hours: 95 Minimum Credit Hours for Graduation**

#### AVIONICS MAINTENANCE TECHNOLOGY (AM44) DIPLOMA

### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

#### **Program Description:**

The Avionics Maintenance Technology diploma program is a sequence of courses designed to prepare students to work in the field of avionics maintenance technology. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention and advancement. The program emphasizes a combination of aircraft airframe and avionics theory and practical application necessary for successful employment. Program graduates receive an Avionics Maintenance Technology Diploma that qualifies them as Avionics Technicians and prepares them to sit for the Federal Aviation Administration (FAA) Airframe certification exams as well as the General Radio Operating License (GROL) exam. The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

Entrance Dates: Fall Semester (Pre-Occupational Courses Any Semester)

Basic Skills	Courses <u>(8 Credit Hours)</u>	<u>Credit Hours</u>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
Occupation	al Curriculum (87 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	5
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
	Aircraft Airframe Structures	2
AVMT 2020	Airframe Sheet Metal and Non-Metallic Structures	5
AVMT 2030	Airframe Welding	1
AVMT 2040	Airframe Assembly and Rigging	2
AVMT 2050	Airframe Inspection	4
AVMT 2060	Aircraft Hydraulic and Pneumatic Systems	2
AVMT 2070	Aircraft Landing Gear Systems	3 3 3
AVMT 2080	Aircraft Environmental Control Systems	3
AVMT 2085	Aircraft Fuel and Instrument Systems	
AVMT 2090	Aircraft Electrical Systems	4
AVMT 2095	Aircraft Communication and Navigation Systems	2
AVIO 1010	Basic Electronics	4
	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics 4	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
AVIO 1070	Aircraft Communication Systems	5

(Program requirements continued on following page)

# AVIONICS MAINTENANCE TECHNOLOGY (CONT.)

# Oc AVI

Occupation	al Curriculum (Cont.)	Credit Hours
AVIO 1080	Navigation Systems	5
AVIO 1090	Flight Director and Autopilot Systems	4

#### **Total Credit Hours: 95 Minimum Credit Hours for Graduation**

#### CARPENTRY (CA22) DIPLOMA

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

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

#### **Entrance Requirements:**

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>.

#### **Basic Skills Courses (8 Credit Hours) Credit Hours** ENGL 1010 Fundamentals of English I 3 Interpersonal Relations and Professional Development 2 EMPL 1000 MATH 1012 Foundations of Mathematics 3 **Occupational Curriculum (37 Credit Hours) Credit Hours** COMP 1000 Introduction to Computers 3 3 CARP 1070 Site Layout, Footings and Foundations CARP 1105 Floor and Wall Framing 4 CARP 1110 Ceiling and Roof Framing 6 Exterior Finishes and Trim 4 CARP 1112 5 CARP 1114 Interior Finishers I COFC 1000 2 Safety 2 COFC 1010 Introduction to Construction 3 COFC 1020 Professional Tool Use and Safety COFC 1030 Materials and Fasteners 2 3 COFC 1050 Construction Print Reading Fundamentals And completion of one of the following specializations: Credit Hours **Residential Specialization (5 Credit Hours)** CARP 1190 Interior Finishes II 2 CARP 1210 Cornice and Soffit 1 2 CARP 1260 Stairs or Commercial Specialization (6 Credit Hours) **Credit Hours** CARP 1310 Doors and Door Hardware 2 CARP 1320 Site Development, Concrete Forming, 4 and Rigging and Reinforcing

#### Total Credit Hours: 50 Minimum Credit Hours for Graduation

#### CNC TECHNOLOGY (CT12) DIPLOMA

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### **Program Description:**

The CNC Technology program is a sequence of courses that prepares students for careers in the CNC 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 CNC theory and practical application necessary for successful employment. Program graduates receive a CNC Technology diploma and have the qualifications of a CNC technician.

#### **Entrance Requirements:**

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>.

Basic Skills Courses (8 Credit Hours)		Credit Hours
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundation of Mathematics	3

Occupation	al Curriculum (46 Credit Hours <u>)</u>	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AMCA 2110	CNC Fundamentals	3
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2190	CAD/CAM Programming	4
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1013	Machine Tool Math	3
MCHT 1015	Surface Grinder Operations	2
MCHT 1017	Characteristics of Metals/Heat Treatment I	3
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
XXXX xxxx	Occupational Elective	3

#### **Total Credit Hours: 54 Minimum Credit Hours for Graduation**

#### CONSTRUCTION MANAGEMENT (CM12) DIPLOMA

### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Construction Management Diploma program is designed for the student who wishes to prepare for a career in some aspect of construction supervision. This diploma in carpentry provides background skills in several areas of construction. Supervision courses, computer aided drafting, project management, and accounting for construction businesses provides a core of management and supervisory courses leading to a Construction Management Diploma.

Entrance Dates: Fall and Spring Semester (Pre-Occupational Courses Any Semester)

Courses (8 Credit Hours)	<b>Credit Hours</b>
Fundamentals of English I	3
Foundations of Mathematics	3
Interpersonal Relations and Professional Development	2
al Curriculum (57 Credit Hours)	<b>Credit Hours</b>
Introduction to Computers	3
Financial Accounting I	4
Site Layout, Footings and Foundations	3
Floor and Wall Framing	4
Ceiling and Roof Framing Covering	6
Exterior Finishes and Trim	4
Interior Finishers I	5
Residential Estimating Review	3 3 3 3
Construction Drafting I	3
Residential Code Review	3
Computerized Construction Scheduling	3
Construction Contracting	4
Safety	2
Introduction to Construction	2
Professional Tool Use and Safety	3
Materials and Fasteners	2
Construction Print Reading Fundamentals	3
	Foundations of Mathematics Interpersonal Relations and Professional Development <b>al Curriculum (57 Credit Hours)</b> Introduction to Computers Financial Accounting I Site Layout, Footings and Foundations Floor and Wall Framing Ceiling and Roof Framing Covering Exterior Finishes and Trim Interior Finishes and Trim Interior Finishers I Residential Estimating Review Construction Drafting I Residential Code Review Computerized Construction Scheduling Construction Contracting Safety Introduction to Construction Professional Tool Use and Safety Materials and Fasteners

**Total Credit Hours: 65 Minimum Credit Hours for Graduation** 

#### DRAFTING TECHNOLOGY (DT12) DIPLOMA

#### **Campus Availability:**

- Floyd County Campus (Not Accepting New Students On the Floyd Campus)
- Walker County Campus

#### Program Description:

The Drafting Technology diploma program prepares students for employment in a variety of positions in the drafting field, such as drafter, CAD operator or Civil Tech based on the specialization area a student chooses to complete. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade recent knowledge and skills or retrain in drafting practices and software.

Entrance Dates: Fall Semester (Pre-Occupational Courses Any Semester)

<b>Basic Skills</b>	Courses (11 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3
or		
DFTG 1015	Practical Geometry and Trigonometry for Drafting Techn	ology (3)
Occupational Curriculum (11 Credit Hours) Credit Hours		

(	
Introduction to Computers	3
CAD Fundamentals	4
Technical Drawing I	4
	Introduction to Computers CAD Fundamentals Technical Drawing I

#### **Choose One of the Following Specializations:**

Mechanical	Drafting Specialization (28 Credit Hours)	<b>Credit Hours</b>
DFTG 1105	3D Mechanical Modeling	4
DFTG 1107	Technical Drawing II	3
DFTG 1109	Technical Drawing III	4
DFTG 1111	Technical Drawing IV	4
DFTG 1113	Technical Drawing V	4
Select a	Minimum of 9 Credits from the Following	
DFTG 2010	Engineering Graphics	4
DFTG 2110	Blueprint Reading for Technical Drawing I	2
DFTG 2300	Drafting Technology Practicum/Internship	3
DFTG 2400	Drafting Technology Practicum/Internship	4
DFTG 2500	Drafting Technology Exit Review	3
DFTG 2600	Drafting Technology Practicum/Internship	6
DFTG 2020	Visualization and Graphics	3
DFTG 2030	Advanced 3D Modeling Architectural	4
DFTG 2040	Advanced 3D Modeling Mechanical	4
DFTG 2120	Print Reading for Architecture	3
DFTG 2130	Manual Drafting Fundamentals	2
DFTG 2210	Blueprint Reading for Technical Drawing II	2

(Program requirements continued on following page)

# DRAFTING TECHNOLOGY (CONT.)

Architectura	al Drafting Specialization (28 Credit Hours)	<b>Credit Hours</b>
DFTG 1125	Architectural Fundamentals	4
DFTG 1127	Architectural 3D Modeling	4
DFTG 1129	Residential Drawing I	4
DFTG 1131	Residential Drawing II	4
	Commercial Drawing I	4
Select a	Minimum of 8 Credits from the Following	
DFTG 2010	Engineering Graphics	4
DFTG 2110	Blueprint Reading for Technical Drawing I	2
DFTG 2300	Drafting Technology Practicum/Internship	3
DFTG 2400	Drafting Technology Practicum/Internship	4
DFTG 2500	Drafting Technology Exit Review	3
DFTG 2600	Drafting Technology Practicum/Internship	6
DFTG 2020	Visualization and Graphics	3
DFTG 2030	Advanced 3D Modeling Architectural	4
DFTG 2040	Advanced 3D Modeling Mechanical	4
DFTG 2120	Print Reading for Architecture	3
DFTG 2130	Manual Drafting Fundamentals	2
DFTG 2210	Blueprint Reading for Technical Drawing II	2

**Total Credit Hours: 50 Minimum Credit Hours for Graduation** 

# ELECTRICAL CONTROL SYSTEMS (EC22) DIPLOMA

#### **Campus Availability:**

• Floyd County Campus

• Walker County Campus

#### Program Description:

The Electrical Control Systems program is a sequence of courses designed to prepare students in the field of Electrical Control Systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLCs, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

#### **Entrance Requirements:**

**Entrance Dates:** Fall Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>.

<b>Basic Skills</b>	Courses (8 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
Occupation	al Curriculum (43 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
IDSY 1100	Basic Circuit Analysis	5
IDSY 1110	Industrial Motor Controls I	5
IDSY 1120	Basic Industrial PLC's	6
IDSY 1130	Industrial Wiring	4
IDSY 1210	Industrial Motor Controls II	6
IDSY 1220	Intermediate Industrial PLC's	5
IDSY 1230	Industrial Instrumentation	6
Choose o	ne of the following courses:	
IDSY 1150	DC and AC Motors	3
IDSY 1180	Magnetic Starters and Braking	(3)

**Total Credit Hours: 51 Minimum Credit Hours for Graduation** 

#### ELECTRICAL SYSTEMS TECHNOLOGY (ES12) DIPLOMA

# **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

The Electrical Systems Technology program provides instruction in the inspection, maintenance, installation, and repair of electrical systems in the residential, commercial, and industrial industries. A combination of theory and practical application is emphasized to develop academic, technical, and professional knowledge and skills. Program graduates receive a diploma in Electrical Systems Technology with a specialization in residential or industrial applications.

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester)

<b>Basic Skills</b>	Courses (8 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (35 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ELTR 1020	Electrical Systems Basics I	3
ELTR 1060	Electrical Prints, Schematics, and Symbols	3
ELTR 1080	Commercial Wiring I	6
ELTR 1090	Commercial Wiring II	6
ELTR 1110	Electric Motors	4
ELTR 1120	Variable Speed/Low Voltage Controls	2
ELTR 1180	Electrical Controls	3
IDFC 1007	Industrial Safety Procedures	2
IDFC 1011	Direct Current I	3

#### And completion of one of the following specializations:

<b>Electrical Co</b>	nstruction and Maintenance Specialization (12 Credit Ho	ours)
ELTR 1205	Residential Wiring I	4
ELTR 1210	Residential Wiring II	4
Choose a	minimum of 4 credits from the following:	
ELTR 1500	Electrical Systems Technology Internship/Practicum	3
ELTR 1510	Electrical Worker	3
ELTR 1520	Grounding and Bonding	2
ELTR 1530	Conduit Sizing	2
ELTR 1540	Wire Pulling and Codes	3 5
ELTR 1525	Photovoltaic Systems	5
Inductrial El	ectrical Technology Specialization (12 Credit Hours)	
ELTR 1220	Industrial PLC's	4
ELTR 1250	Diagnostic Troubleshooting	2
ELTR 1260	Transformers	3
ELTR 1270	National Electrical Code Industrial Applications	3

#### Total Credit Hours: 55 Minimum Credit Hours for Graduation

#### ELECTRONICS FUNDAMENTALS (EF12) DIPLOMA

### **Campus Availability:**

• Walker County Campus

#### **Program Description:**

The Electronics Fundamentals program is designed to prepare students for careers in electronics professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics theory and practical application necessary for successful employment. Program graduates receive an Electronics Fundamentals Diploma which prepares them for entry-level positions in the electronics field and qualifies them for admission to the Electronics Technology program.

Entrance Date: Fall Semester (Pre-Occupational Courses Any Semester)

<b>Basic Skills</b>	Courses (11 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3
or		
MATH 1017	Trigonometry	(3)
Occupational Curriculum (29 Credit Hours)		<b>Credit Hours</b>
occupation	(2) create fiburs)	creatt fiburs
COMP 1000	Introduction to Computers	3
COMP 1000	Introduction to Computers	
COMP 1000 ELCR 1005	Introduction to Computers Soldering Technology	3 1
COMP 1000 ELCR 1005 ELCR 1010	Introduction to Computers Soldering Technology Direct Current Circuits Alternating Current Circuits Solid State Devices	3 1 5
COMP 1000 ELCR 1005 ELCR 1010 ELCR 1020	Introduction to Computers Soldering Technology Direct Current Circuits Alternating Current Circuits	3 1 5 7

**Total Credit Hours: 40 Minimum Credit Hours for Graduation** 

#### ELECTRONICS TECHNOLOGY (ET14) DIPLOMA

# **Campus Availability:**

- Floyd County Campus (Not Accepting New Students On the Floyd Campus)
- Walker County Campus
- Whitfield Murray Campus

# **Program Description:**

The Electronics Technology Diploma program is a sequence of courses designed to prepare students for careers in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates are to be competent in the general areas of communications, mathematics, computer literacy, and interpersonal relations. The program emphasizes a combination of electronics technology theory and practical application necessary for successful employment using both manual and computerized electronics systems. Program graduates receive an Electronics Technology Diploma which qualifies them as electronics technicians with a specialization in industrial electronics or telecommunications electronics.

Entrance Dates: Fall Semester (Pre-Occupational Courses Any Semester)

<b>Basic Skills</b>	Courses (11 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
MATH 1015	Geometry and Trigonometry	3
or		
MATH 1017	Trigonometry	(3)

Occupational Curriculum (29 Credit Hours)		<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ELCR 1005	Soldering Technology	1
ELCR 1010	Direct Current Circuits	5
ELCR 1020	Alternating Current Circuits	7
ELCR 1030	Solid State Devices	5
ELCR 1040	Digital and Microprocessor Fundamentals	5
ELCR 1060	Linear Integrated Circuits	3

# And completion of the following specialization:

#### Industrial Electronics Technology Specialization (16 Credit Hours)

ELCR 2110	Process Control	3
ELCR 2120	Motor Controls	3
ELCR 2130	Programmable Controllers	3
ELCR 2140	Mechanical Devices	2
ELCR 2150	Fluid Power	2
ELCR 2160	Advanced Microprocessors and Robotics	3

#### **Total Credit Hours: 56 Minimum Credit Hours for Graduation**

#### HORTICULTURE (EH12) DIPLOMA

# **Campus Availability:**

• Floyd County Campus

# **Program Description:**

The Environmental Horticulture program is a sequence of courses that prepares students for careers in environmental horticulture. The program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills.

ENGL 1010Fundamentals of English I3EMPL 1000Interpersonal Relations and Professional Development2MATH 1012Foundations of Mathematics3Occupational Curriculum (21 Credit Hours)Credit HoursCOMP 1000Introduction to Computers3HORT 1010Horticulture Science3HORT 1020Herbaceous Plant Identification3HORT 1080Pest Management3HORT 1150Environmental Horticulture Internship3XXXX xxxxHorticulture Specialization (15 Credit Hours)Credit HoursXXXX XXXXGuided Elective3andSelect 12 Hours From List Below3HORT 1050Nursery Production and Management3HORT 1100Horticulture Business Management3HORT 1120Landscape Management3HORT 1120Landscape Management3HORT 1120Landscape Contracting3HORT 1120Landscape Contracting3HORT 1120Landscape Construction and Management3HORT 1200Arboriculture Science3HORT 1410Soils3HORT 1410Soils3HORT 1420Golf Course Design Construction and Management3HORT 1410Soils3HORT 1410Soils3HORT 1420Advanced Landscape Design3HORT 1200Arboriculture Science3HORT 1200Arboriculture Science3HORT 1410Soils3	Basic Skills	Courses (8 Credit Hours)*	<b>Credit Hours</b>
MATH 1012Foundations of Mathematics3Occupational Curriculum (21 Credit Hours)Credit HoursCOMP 1000Introduction to Computers3HORT 1000Horticulture Science3HORT 1010Woody Ornamental Plant Identification3HORT 1020Herbaceous Plant Identification3HORT 1050Environmental Horticulture Internship3XXXX xxxxHorticulture Elective3And completion of one of the following specializations: General Horticulture Specialization (15 Credit Hours)Credit HoursXXXX XXXXGuided Elective and3Select 12 Hours From List BelowHORT 1030Greenhouse Management3HORT 1050Nursery Production and Management3HORT 1120Landscape Management3HORT 1120Arboriculture Science3HORT 1120Arboriculture Science3HORT 1120Arboriculture Science3HORT 1130Turgrass Management3HORT 1300Turfgrass Management3HORT 1410Soils3HORT 1420Golf Course Design Construction and Management3HORT 1430Advanced Landscape Design3HORT 1500Small Gas Engine Repair and Maintenance3HORT 1430Advanced Landscape Design3HORT 1430Golf Course Design Construction and Management3HORT 1430Advanced Landscape Design3HORT 1430Movaned Landscape Design3HORT 1560Compu	ENGL 1010	Fundamentals of English I	3
Occupational Curriculum (21 Credit Hours)Credit HoursCOMP 1000Introduction to Computers3HORT 1000Horticulture Science3HORT 1010Woody Ornamental Plant Identification3HORT 1020Herbaceous Plant Identification3HORT 1080Pest Management3HORT 1150Environmental Horticulture Internship3XXXX xxxxHorticulture Elective3And completion of one of the following specializations: General Horticulture Specialization (15 Credit Hours)Credit HoursXXXX XXXXGuided Elective3andSelect 12 Hours From List BelowCredit HoursHORT 1030Greenhouse Management3HORT 1040Nursery Production and Management3HORT 1120Landscape Management3HORT 1120Landscape Contracting3HORT 1200Arboriculture Science3HORT 1310Irrigation3HORT 1310Irrigation3HORT 1320Glo Course Design Construction and Management3HORT 1410Soils3HORT 1420Golf Course Design Construction and Management3HORT 1420Golf Course Design Construction and Management3HORT 1500Small Gas Engine Repair and Maintenance3HORT 1420Golf Course Design Construction and Management3HORT 1430Advanced Landscape Design3HORT 1440Landscape Grading and Drainage4HORT 1560Computer-Aided Landsc	EMPL 1000	Interpersonal Relations and Professional Development	
COMP 1000Introduction to Computers3HORT 1000Horticulture Science3HORT 1010Woody Ornamental Plant Identification3HORT 1020Herbaceous Plant Identification3HORT 1020Herbaceous Plant Identification3HORT 1150Environmental Horticulture Internship3XXXX xxxxHorticulture Elective3And completion of one of the following specializations:Credit HoursGeneral Horticulture Specialization (15 Credit Hours)3XXXX XXXXGuided Elective3and3Select 12 Hours From List Below3HORT 1050Nursery Production and Management3HORT 1120Landscape Management3HORT 1120Arboriculture Science3HORT 1120Arboriculture Science3HORT 1200Arboriculture Science3HORT 1410Soils3HORT 1420Golf Course Design Construction and Management3HORT 1430Advanced Landscape Design3HORT 1440Landscape Grading and Drainage4HORT 1500Small Gas Engline Repair and Maintenance3HORT 1690Horticulture Spenish3HORT 1690Horticulture Spanish3HORT 1690Horticulture Spanish3HORT 1700Large Equipment Operation3HORT 1700Large Equipment Operation3HORT 1690Urban Landscape Issues4HORT 1720Introductory Floral Design<	MATH 1012	Foundations of Mathematics	3
HORT 1000Horticulture Science3HORT 1010Woody Ornamental Plant Identification3HORT 1020Herbaceous Plant Identification3HORT 1080Pest Management3HORT 1150Environmental Horticulture Internship3XXXX xxxxHorticulture Elective3And completion of one of the following specializations: General Horticulture Specialization (15 Credit Hours)Credit HoursXXXX XXXXGuided Elective3andSelect 12 Hours From List Below3HORT 1030Greenhouse Management3HORT 1120Landscape Management3HORT 1140Horticulture Business Management3HORT 1160Landscape Contracting3HORT 1160Landscape Contracting3HORT 1330Turfgrass Management3HORT 1404Horticulture Science3HORT 1410Soils3HORT 1410Soils3HORT 1420Golf Course Design Construction and Management3HORT 1440Landscape Grading and Drainage4HORT 1440Landscape Grading and Drainage4HORT 1500Small Gas Engine Repair and Maintenance3HORT 1680Woody Plant Identification II2HORT 1690Horticulture Spanish3HORT 1700Large Equipment Operation3HORT 1710Large Equipment Operation3HORT 1720Introductory Floral Design3HORT 1700Large Equipment Operation <th></th> <th>al Curriculum (21 Credit Hours)</th> <th></th>		al Curriculum (21 Credit Hours)	
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HORT 2249 Flower Shop Management 3	HORT 1560		3
HORT 2249 Flower Shop Management 3	HORT 1680	Woody Plant Identification II	2
HORT 2249 Flower Shop Management 3	HORT 1690	Horticulture Spanish	3
HORT 2249 Flower Shop Management 3	HORT 1700	Large Equipment Operation	3
HORT 2249 Flower Shop Management 3	HORT 1720	Introductory Floral Design	3
HORT 2249 Flower Shop Management 3	HORT 1750		3
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HORT 2500Specialty Landscape Construction3			3
	HORT 2500	Specialty Landscape Construction	3

# HORTICULTURE (CONT.)

#### or

Landscape I	Management Specialization (15 Credit Hours)	<b>Credit Hours</b>
HORT 1040	Landscape Installation	3
HORT 1060	Landscape Design	3
HORT 1120	Landscape Management	3
HORT 1330	Turfgrass Management	3
HORT 1310	Irrigation	3

#### or

Floral Management Specialization (15 Credit Hours)		<b>Credit Hours</b>
HORT 1720	Introductory Floral Design	3
HORT 1730	Advanced Floral Design	3
HORT 1750	Interiorscaping	3
HORT 2249	Flower Shop Management	3
HORT xxxx	Horticulture Elective	3

# **Total Credit Hours: 44 Minimum Credit Hours for Graduation**

# INDUSTRIAL MECHANICAL SYSTEMS (IMS2) DIPLOMA

#### (Not Accepting New Students Into This Program)

#### Program Description:

The Industrial Mechanical Systems diploma program provides instruction to prepare students for employment in a variety of positions within the industrial production equipment maintenance field. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program receive an Industrial Mechanical Systems diploma that qualifies them for employment as an industrial maintenance mechanic.

#### **Entrance Requirements:**

**Entrance Dates:** Fall Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>.

<b>Basic Skills</b>	Courses (8 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (44 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
IDSY 1020	Print Reading and Problem Solving	3
IDSY 1100	Basic Circuit Analysis	5
IDSY 1110	Industrial Motor Controls I	5
IDSY 1160	Mechanical Laws and Principles	4
IDSY 1170	Industrial Mechanics	6
IDSY 1190	Fluid Power and Piping Systems	6
IDSY 1240	Maintenance for Reliability	4
WELD 1330	Metal Welding and Cutting Techniques	2
XXXX xxxx	Guided Electives	6

**Total Credit Hours: 52 Minimum Credit Hours for Graduation** 

#### INDUSTRIAL SYSTEMS TECHNOLOGY (IST4) DIPLOMA

# **Campus Availability:**

- Floyd County Campus
- Walker County Campus
- Whitfield Murray Campus

# **Program Description:**

The Industrial Systems Technology Diploma program is designed for the student who wishes to prepare for a career as an industrial systems technician/electrician. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The diploma program teaches skills in industrial systems technology providing background skills in several areas of industrial maintenance including electronics, industrial wiring, motors, controls, PLCs, instrumentation, fluid power, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems Technology Diploma that qualifies them for employment as industrial electricians or industrial systems technicians.

# **Entrance Requirements:**

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1013	Algebraic Concepts	3
Occupation	al Curriculum (52 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
IDSY 1100	Basic Circuit Analysis	5
IDSY 1170	Industrial Mechanics	6
IDSY 1110	Industrial Motor Controls I	5
IDSY 1120	Basic Industrial PLC's	6
IDSY 1130	Industrial Wiring	4
IDSY 1190	Fluid Power and Piping Systems	6
IDSY 1210	Industrial Motor Controls II	5
IDSY 1220	Intermediate Industrial PLC's	6
IDSY 1230	Industrial Instrumentation	6

**Total Credit Hours: 60 Minimum Credit Hours for Graduation** 

#### MACHINE TOOL TECHNOLOGY (MTT2) DIPLOMA

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

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 have the qualifications of a machine tool technician.

#### **Entrance Requirements:**

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester) **Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>

<b>Basic Skills</b>	Courses (8 Credit Hours)*	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (40 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
AMCA 2110	CNC Fundamentals	3
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1013	Machine Tool Math	3
or		
MATH 1015	Geometry and Trigonometry	(3)
MCHT 1015	Surface Grinder Operations	2
MCHT 1017	Characteristics of Metals/Heat Treatment I	3
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
MCHT 1219	Lathe Operations II	4
MCHT 1220	Mill Operations II	4
XXXX xxxx	Occupational Elective	3

#### **Total Credit Hours: 48 Minimum Credit Hours for Graduation**

# WELDING AND JOINING TECHNOLOGY (WAJ2) DIPLOMA

# **Campus Availability:**

• Floyd County Campus

Walker County Campus

# Program Description:

The Welding and Joining Technology diploma is designed to prepare students for careers in the welding industry. Program learning opportunities develop academic, technical, professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes welding theory and practical application necessary for successful employment. Program graduates receive a Welding and Joining Technology diploma, have the qualifications of a welding and joining technician, and are prepared to take qualification tests.

# **Entrance Requirements:**

**Entrance Dates:** Fall and Spring Semester (Pre-Occupational Courses Any Semester) **Age:** Minimum of 16 years of age

**Education:** No high school diploma or GED<sup>®</sup> is required to enter program but must have documentation of high school diploma or GED<sup>®</sup> to graduate and receive the diploma. See the Success Center for information on earning your high school diploma or GED<sup>®</sup>.

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (42 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
WELD 1000	Introduction to Welding Technology	3
WELD 1010	Oxyfuel Cutting	3
WELD 1030	Blueprint Reading for Welding Technology	3
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	5	4
WELD 1070	Overhead Shielded Metal Arc Welding	4
WELD 1090	Gas Metal Arc Welding	4
WELD 1110	Gas Tungsten Arc Welding	4
WELD 1120	Preparation for Industrial Qualification	3
XXXX xxxx	Program Elective	3
Recommend	ded Electives	<b>Credit Hours</b>
WELD 1150	Advanced Gas Tungsten Arc Welding	(3)
	Fabrication Processes	(3)
WELD 1152	Pipe Welding	(3)
WELD 1153	Flux Cored Arc Welding	(4)
WELD 1154	Plasma Cutting	(3)

Total Credit Hours: 50 Minimum Credit Hours for Graduation

#### ADVANCED PLC AND HMI TECHNICIAN I (AP21) CERTIFICATE

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

The Advanced PLC and HMI Technician I Technical Certificate of Credit program is designed to offer advanced technical training in high technology automated systems. Emphasis is placed on advanced skills for Industrial Systems Technology program graduates or industry technicians. Graduates may be eligible for advanced employment opportunities.

#### **Entrance Requirements:**

**Age:** Minimum of 19 years of age **Entrance Dates:** Fall Semester

<b>Required C</b>	ourses (12 Credit Hours)	Credit Hours
IDSY 2700	Advanced PLC's I	4
IDSY 2730	Advanced PLC's II	4
IDSY 2750	Human Machine Interface	4

**Total Credit Hours: 12 Minimum Credit Hours for Graduation** 

#### ADVANCED PLC AND HMI TECHNOLOGY II (AP31) CERTIFICATE

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

The Advanced PLC and HMI Technician II Technical Certificate of Credit continues the technical training provided in the Technician I program. Instruction is provided in advanced process control, equipment networking, and industrial graphic communications.

#### **Entrance Requirements:**

**Age:** Minimum of 19 years of age **Entrance Dates:** Fall Semester

Required Courses (12 Credit Hours)		Credit Hours
IDSY 2800	Advanced Process Control	4
IDSY 2830	Networking Industrial Equipment	4
IDSY 2850	Industrial Graphical Communication	4

**Total Credit Hours: 12 Minimum Credit Hours for Graduation** 

#### ADVANCED SHIELDED METAL ARC WELDER (OSM1) CERTIFICATE

# **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### **Program Description:**

The Advanced Shielded Metal Arc Welder Technical Certificate of Credit is a continuation of the basic certificate. The advanced program provides instruction in shielded metal arc welding in the overhead, horizontal, and vertical positions.

#### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

**Prerequisite to taking program:** Completion of Basic Shielded Metal Arc Welder Certificate

<b>Required Co</b>	ourses (12 Credit Hours)	Credit Hours
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
WELD 1070	Overhead Shielded Metal Arc Welding	4

**Total Credit Hours: 12 Minimum Credit Hours for Graduation** 

#### AUTOMOTIVE CHASSIS TECHNICIAN SPECIALIST (ASG1) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

Walker County Campus

# **Program Description:**

The Automotive Suspension and Steering Technician certificate program provides students with the skills needed to enter the automotive industry as an entry level chassis technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, chassis components and types, steering system components and service, alignment theory and procedures, and brake system operation, diagnosis and repair.

Entrance Date: Fall and Spring Semester

Required Courses (17 Credit Hours)		<b>Credit Hours</b>
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1030	Automotive Brake Systems	4
AUTT 1050	Automotive Suspension and Steering Systems	4

Total Credit Hours: 17 Minimum Credit Hours for Graduation

#### AUTOMOTIVE CLIMATE CONTROL TECHNICIAN (AH21) CERTIFICATE

#### **Campus Availability:**

• Floyd County Campus

• Walker County Campus

#### **Program Description:**

The Automotive Climate Control Technician certificate program provides students with skills for entering the automotive service industry as an entry level climate control technician. Topics covered include: basic shop safety, electrical/electronic theory and diagnosis, and the theory, operation, diagnosis and servicing of automotive climate control systems.

Entrance Date: Fall and Spring Semester

Required Courses (14 Credit Hours)		Credit Hours
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1060	Automotive Climate Control Systems	5

**Total Credit Hours: 14 Minimum Credit Hours for Graduation** 

#### AUTOMOTIVE COLLISION REPAIR ASSISTANT I (AB51) CERTIFICATE

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

The Automotive Collision Repair Assistant I certificate program prepares students for employment as assistants to lead and master technicians in an automotive collision repair shop. Topics covered include work safety, hand and power tools, basic component replacement, automotive welding techniques, and mechanical and electrical systems.

Entrance Dates: Fall Semester

Required Courses (16 Credit Hours)		<b>Credit Hours</b>
ACRP 1000	Introduction to Auto Collision Repair	4
ACRP 1005	Automobile Component Repair and Replacement	4
ACRP 1015	Fundamentals of Automotive Welding	4
ACRP 1018	Mechanical and Electrical Systems	4

**Total Credit Hours: 16 Minimum Credit Hours for Graduation** 

### AUTO ELECTRICAL/ELECTRONIC SYSTEMS TECHNICIAN (AE41) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### Program Description:

This program provides students with the knowledge and skills necessary to diagnose, service, and repair basic electrical/electronic systems as an entry-level automotive technician. Topics include automotive batteries, starting systems, charging systems, instrumentation, lighting, and accessories.

Entrance Date: Fall and Spring Semester

#### Required Courses (9 Credit Hours)

AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7

**Total Credit Hours: 9 Minimum Credit Hours for Graduation** 

#### AUTOMOTIVE ENGINE PERFORMANCE TECHNICIAN (AE51) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

#### **Program Description:**

This program introduces students to the knowledge and skills they will need as entry-level engine performance technicians. Topics covered include theory, diagnosis, service, and repair of fuel systems, ignition systems, emission systems, and electronic engine controls.

#### Entrance Date: Fall and Spring Semester

<b>Required Co</b>	ourses (16 Credit Hours)	<b>Credit Hours</b>
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 1040	Automotive Engine Performance	7

Total Credit Hours: 16 Minimum Credit Hours for Graduation

**Credit Hours** 

### AUTOMOTIVE ENGINE REPAIR TECHNICIAN (AE61) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

• Walker County Campus

### **Program Description:**

The Automotive Engine Repair Technician certificate provides the student with entrylevel skills that include basic shop safety, engine principles of operation, basic engine diagnosis, and basic engine repair. Upon satisfactory completion of this program's curriculum, the student will receive an Automotive Engine Repair Technician certificate.

Entrance Date: Fall and Spring Semester

Required Courses (15 Credit Hours)		Credit Hours
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2010	Automotive Engine Repair	6

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

### AUTOMOTIVE REFINISHING ASSISTANT II (AP71) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Refinishing Assistant II program is an advanced certificate option for students who complete the Automotive Refinishing Assistant I program. This program is designed to produce graduates who are entry level paint and refinishing specialists. Topics will include surface preparation, paint identification, spray gun equipment, spray gun techniques, blending, and tinting and matching colors.

Entrance Date: Fall Semester

Required Courses (10 Credit Hours)			
ACRP 2000	Introduction to Refinishing		
ACRP 2005	Fundamentals of Refinishing I		

Credit	Hours

5
5

Total Credit Hours: 10 Minimum Credit Hours for Graduation

### AUTOMOTIVE TRANSMISSION/TRANSAXLE TECH SPECIALIST(AA71) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The Automotive Transmission/Transaxle Tech Specialist certificate program provides students with the skills to enter the automotive industry as an entry level transmission, transaxle, and drive line technician. Topics covered include: shop safety, basic electrical/electronic theory and diagnosis, manual transmission/transaxle operation and diagnosis, automatic transmission/transaxle operation and diagnosis, axles operation and diagnosis, differentials operation and diagnosis, and 4WD/AWD systems operation and diagnosis.

### Entrance Date: Fall and Spring Semester

Required Courses (18 Credit Hours)		<b>Credit Hours</b>
AUTT 1010	Automotive Technology Introduction	2
AUTT 1020	Automotive Electrical Systems	7
AUTT 2020	Automotive Manual Drive Train and Axles	4
AUTT 2030	Automotive Automatic Transmissions and Transaxles	5

Total Credit Hours: 18 Minimum Credit Hours for Graduation

### AVIATION MAINTENANCE TECHNICIAN (AM24) CERTIFICATE

### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

### **Program Description:**

The Aviation Maintenance Technician program courses prepare students for employment in the field of aviation maintenance. The program emphasizes a combination of aircraft maintenance theory and aircraft maintenance application. This program meets the academic requirement for the FAA Airframe and Powerplant certification.

The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

Entrance Date: Fall Semester

Occupation	al Curriculum (84 Credit Hours)	Credit Hours
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	5
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
AVMT 2010	Aircraft Airframe Structures	2
AVMT 2020	Airframe Sheet Metal and Non-Metallic Structures	5 1
AVMT 2030	Airframe Welding	1
AVMT 2040	Airframe Assembly and Rigging	2
AVMT 2050	Airframe Inspection	4
AVMT 2060	Aircraft Hydraulic and Pneumatic Systems	2
AVMT 2070	Aircraft Landing Gear Systems	3 3 3 4
AVMT 2080	Aircraft Environmental Control Systems	3
AVMT 2085	Aircraft Fuel and Instrument Systems	3
AVMT 2090	Aircraft Electrical Systems	
AVMT 2095	Aircraft Communication and Navigation Systems	2 3 5 3 3 1
AVMT 2210	Reciprocating Engine Powerplants I	3
AVMT 2220	Reciprocating Engine Powerplants II	5
AVMT 2230	Gas Turbine Powerplants I	3
AVMT 2240	Gas Turbine Powerplants II	3
AVMT 2250	Aircraft Engine Inspection	
AVMT 2260	Aircraft Engine Fuel and Fuel Metering Systems	5
AVMT 2270	Powerplant Instruments, Fire Protection and Electrical System	stems 3
AVMT 2275	Powerplant Ignition and Starting Systems	4
AVMT 2280	Aircraft Powerplant Accessory Systems	3
AVMT 2285	Aircraft Propeller Systems	3

**Total Credit Hours: 84 Minimum Credit Hours for Graduation** 

### AVIATION MAINTENANCE TECHNICIAN-AIRFRAME (AMT1) CERTIFICATE

### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

### Program Description:

The Aviation Maintenance Technician-Airframe program courses prepare students for employment in the field of aviation maintenance. The program emphasizes a combination of aircraft maintenance theory and practical application. This program meets the FAA academic requirements for Mechanic-Airframe certification.

The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

Entrance Date: Fall Semester

Required Co	ourses (51 Credit Hours)	<b>Credit Hours</b>
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	5
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
AVMT 2010	Aircraft Airframe Structures	2
AVMT 2020	Airframe Sheet Metal and Non-Metallic Structures	5
AVMT 2030	Airframe Welding	1
AVMT 2040	Airframe Assembly and Rigging	2
AVMT 2050	Airframe Inspection	4
AVMT 2060	Aircraft Hydraulic and Pneumatic Systems	2
AVMT 2070	Aircraft Landing Gear Systems	3
AVMT 2080	Aircraft Environmental Control Systems	2
AVMT 2085	Aircraft Fuel and Instrument Systems	3
AVMT 2090	Aircraft Electrical Systems	4
AVMT 2095	Aircraft Communication and Navigation Systems	2

### Total Credit Hours: 51 Minimum Credit Hours for Graduation

### AVIATION MAINTENANCE TECHICIAN-POWER PLANT (AM61) CERTIFICATE

### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport/J.H. Towers Field

### **Program Description:**

The Aviation Maintenance Technician-Powerplant program prepares students for employment in the field of aviation maintenance. The program emphasizes a combination of aircraft powerplant maintenance theory and practical application. This program meets the FAA academic requirements for Mechanic-Powerplant certification.

The Aviation Maintenance Technology program ('AVMT' Courses only) are regulated and certificated by the Federal Aviation Administration.

Entrance Date: Fall Semester

Required Co	ourses (53 Credit Hours)	Credit Hours
AVMT 1000	Aviation Mathematics	2
AVMT 1010	Aircraft Maintenance Regulations	2
AVMT 1020	Aircraft Applied Sciences I	5
AVMT 1025	Aircraft Applied Sciences II	4
AVMT 1030	Aircraft Electricity and Electronics	5
AVMT 1210	Aviation Physics	2
AVMT 2210	Reciprocating Engine Powerplants I	3
AVMT 2220	Reciprocating Engine Powerplants II	5
AVMT 2230	Gas Turbine Powerplants I	3
AVMT 2240	Gas Turbine Powerplants II	3
AVMT 2250	Aircraft Engine Inspection	1
AVMT 2260	Aircraft Engine Fuel and Fuel Metering Systems	5
AVMT 2270	Powerplant Instruments, Fire Protection and Electrical Sy	stems 3
AVMT 2275	Powerplant Ignition and Starting Systems	4
AVMT 2280	Aircraft Powerplant Accessory Systems	3
AVMT 2285	Aircraft Propeller Systems	3

**Total Credit Hours: 53 Minimum Credit Hours for Graduation** 

### AVIONICS BENCH TECHNICIAN (AB81) CERTIFICATE

### Location:

• GNTC Aviation Training Center at Richard B. Russell Regional Airport

### **Program Description:**

The Avionics Bench Technician certificate program is a sequence of courses that prepare students for employment in the field of avionics maintenance technology - aircraft electronics. Graduates of this program are qualified to work on aircraft electronics in avionics repair stations and should be prepared to sit for the General Radio Operating License (GROL) exam.

### Entrance Date: Fall Semester

Required Courses (33 Credit Hours)		Credit Hours
AVIO 1010	Basic Electronics	4
AVIO 1020	Avionics Maintenance Practices	3
AVIO 1030	Advanced Electronics	4
AVIO 1040	Digital Electronics	4
AVIO 1060	Aircraft Logic Systems	4
AVIO 1070	Aircraft Communication Systems	5
AVIO 1080	Navigation Systems	5
AVIO 1090	Flight Director and Autopilot Systems	4

**Total Credit Hours: 33 Minimum Credit Hours for Graduation** 

### BASIC MACHINIST (BM31) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

Walker County Campus

### **Program Description:**

The Basic Machinist certificate program prepares students for a machine tool operator position with a machine shop or machine tool establishment. Topics include foundations of mathematics, an introduction to machine tool technology, and blueprint reading for machine tool applications.

### Entrance Date: Fall Semester

Required Courses (10 Credit Hours)		Credit Hours
MATH 1012	Foundations of Mathematics	3
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3

### Total Credit Hours: 10 Minimum Credit Hours for Graduation

### BASIC SHIELDED METAL ARC WELDER (FS31) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### Program Description:

The Basic Shielded Metal Arc Welder Technical Certificate of credit prepares students for careers in the welding and joining industry. This certificate emphasizes arc welding in the flat position and is pre-requisite to the advanced certificate.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (10 Credit Hours)		Credit Hours
WELD 1000	Introduction to Welding Technology	3
WELD 1010	Oxyfuel Cutting	3
WELD 1040	Flat Shielded Metal Arc Welding	4

### **Total Credit Hours: 10 Minimum Credit Hours for Graduation**

### CABINETMAKING ASSEMBLY TECHNICIAN (CA11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description**

The Cabinetmaking Assembly Technician program prepares individuals for employment as cabinetmaking assemblers and installers. Program completer are trained in the use of hand and power tools, cabinet design and layout, wood joints and fastening methods, and cutting cabinet components.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

<b>Required Co</b>	ourses (11 Credit Hours)	Credit Hours
CABT 1080	Cabinet Design and Layout	3
CABT 1110	Wood Joints and Fastening Methods	5
CABT 1114	Cabinet Components	3

**Total Credit Hours: 11 Minimum Credit Hours for Graduation** 

### CABINETMAKING INSTALLATION TECHNICIAN (CI11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description**

The Cabinetmaking Installation Technician certificate program prepares individuals for employment as cabinetmaking assemblers and installers. Program completers are trained in the use of hand and power tools, materials, cabinet assembly, and cabinet finishing and installation.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (12 Credit Hours)		Credit Hours
CABT 1116	Cabinet Assembly I	5
CABT 1118	Door, Drawer, and Hardware Installation	2
CABT 1120	Laminates and Veneers	2
CABT 1122	Cabinet Finishing and Installation	3

Total Credit Hours: 12 Minimum Credit Hours for Graduation

### CAD OPERATOR MECHANICAL (CP61) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus (Not Accepting New Students On the Floyd Campus)
- Walker County Campus

### **Program Description:**

All of the courses in the CAD Operator - Mechanical TCC program are embedded in the Drafting Technology diploma and degree programs. The CAD Operator TCC program provides students with the opportunity to continue on the career pathway toward advancement in the drafting profession. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting practices and software.

Entrance Date: Fall Semester

Required Courses (11 Credit Hours)		Credit Hours
COMP 1000	Introduction to Computers	3
DFTG 1103	Technical Drawing I	4
DFTG 1109	Technical Drawing III	4

**Total Credit Hours: 11 Minimum Credit Hours for Graduation** 

### CERTIFIED CONSTRUCTION WORKER (CCW1) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

Certified Construction Worker program offers training for the construction industry providing students with the knowledge and skills they need to work effectively on a construction site. Completion of the program qualifies graduates for entry level employment. Topics include safety, tool use and safety, materials and fasteners, and construction print reading.

### Entrance Date: Fall Semester

Required Courses (12 Credit Hours)		<b>Credit Hours</b>
COFC 1000	Safety	2
COFC 1010	Introduction to Construction	2
COFC 1020	Professional Tool Use and Safety	3
COFC 1030	Materials and Fasteners	2
COFC 1050	Construction Print Reading Fundamentals	3

### **Total Credit Hours: 12 Minimum Credit Hours for Graduation**

### CNC SPECIALIST (CS51) CERTIFICATE

### Campus Availability:

• Floyd County Campus

Walker County Campus

### **Program Description:**

The CNC Specialist Certificate of Credit program provides training for graduates to gain employment as CNC machine tool technicians. Topics include CNC Fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (20 Credit Hours)		Credit Hours
AMCA 2110	CNC Fundamentals	3
AMCA 2130	CNC Mill Manual Programming	5
AMCA 2150	CNC Lathe Manual Programming	5
AMCA 2170	CNC Practical Applications	3
AMCA 2190	CAD/CAM Programming	4

**Total Credit Hours: 20 Minimum Credit Hours for Graduation** 

### COMMERCIAL TRUCK DRIVING (CT61) CERTIFICATE

### **Campus Availability:**

- Gordon County: 632 Richardson Road Commercial Truck Driving Facility
- Walker County Campus

### Program Description:

The Commercial Truck Driving certificate program provides basic training in the principles and skills of commercial truck operations. The program is based on the definition of a truck driver as one who operates a commercial motor vehicle of all different sizes and descriptions on all types of roads. At the completion of the program, the student is administered the Georgia CDL Skills Exam.

**Length of Program:** Eight (8)-fifteen (15) weeks depending on class. Call the Student Success Center for specific information.

### **Entrance Requirements:**

**Age:** Minimum of 21 years of age. (18-20 year old may take the program, however, they can only drive in Georgia.)

**Education:** High school diploma or GED<sup>®</sup> is not required.

**Assessment Results:** Applicants must make minimum scores in reading, writing, and math on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Entrance Dates: Scheduled Start Dates

**Other:** (1) Secure a Commercial Driving License Learner's Permit from the Department of Drivers Services of your state of residence; (2) Obtain a Motor Vehicle Report (MVR) from the Department of Drivers Services from your state of residence indicating no DUI within the last seven years and not more than four (4) violation points within the last three (3) years. The MVR must be dated within 30 days of class begin date; (3) Obtain a valid DOT physical by a physician/medical center; (4) Pass a DOT drug test dated within 30 days of class begin date from a physician/medical center.

Students will be subject to random drug tests during the course with selection made by neutral criteria so that all students have an equal chance of being tested.

**Approximate Program Cost:** \$1,125 tuition plus any required college fees, books and materials. Also required are fees for DOT drug screening, DOT physical, CDL road test, MVR report, fuel surcharge, and AP Learner's Permit. (\*)

\*(Approximate program cost: \$1150 if HOPE eligible.)

Required Co	ourses (9 Credit Hours)	<b>Credit Hours</b>
CTDL 1010	Fundamentals of Commercial Driving	3
CTDL 1020	Combination Vehicle Basic Operation and Range Work	2
one of th	e following:	
CTDL 1030	Combination Vehicle Advanced Operations	4
CTDL 1040	Commercial Driving Internship	(4)

### **Total Credit Hours: 9 Minimum Credit Hours for Graduation**

### CONSTRUCTION MANAGEMENT APPRENTICE (CM71) CERTIFICATE

### **Campus Availability:**

• Gordon County Campus

### **Program Description:**

The Construction Management Apprentice program offers instruction in the fundamentals of construction and management of construction projects. Topics include instruction in basic construction knowledge and skills, construction drafting, costs and materials estimating, inspection practices, and print reading.

### Entrance Date: Fall Semester

Required Courses (22 Credit Hours)		<u>Credit Hours</u>
CARP 1070	Site Layout, Footings and Foundations	3
CMTT 2010	Residential Estimating Review	3
CMTT 2020	Construction Drafting I	3
CMTT 2050	Residential Code Review	3
COFC 1000	Safety	2
COFC 1020	Professional Tool Use and Safety	3
COFC 1030	Materials and Fasteners	2
COFC 1050	Construction Print Reading Fundamentals	3

**Total Credit Hours: 22 Minimum Credit Hours for Graduation** 

### ELECTRICAL MAINTENANCE TECHNICIAN (EM81) CERTIFICATE

### (Not Accepting New Students Into This Program)

### **Program Description:**

The Electrical Maintenance Technician Technical Certificate of Credit provides instruction in industrial systems electrical inspection, maintenance, service, and repair. Topics include DC and AC fundamentals, motor controls, magnetic starters and braking systems, PLCs, and industrial wiring procedures.

### Entrance Date: Fall Semester

Required Courses (35 Credit Hours)		Credit Hours
IDFC 1007	Industrial Safety Procedures	2
IDFC 1011	Direct Current I	3
IDFC 1012	Alternating Current I	3
IDSY 1150	DC and AC Motors	3
IDSY 1180	Magnetic Starters and Braking	3
IDSY 1110	Industrial Motor Controls I	5
IDSY 1120	Basic Industrial PLC's	6
IDSY 1130	Industrial Wiring	4
IDSY 1220	Intermediate Industrial PLC's	6

### **Total Credit Hours: 35 Minimum Credit Hours for Graduation**

### ELECTRICAL TECHNICIAN (ET51) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

• Whitfield Murray Campus

### **Program Description:**

The Electrical Technician Technical Certificate of credit provides training in basic electrical wiring skills enabling students to gain entry level employment in the construction and maintenance industry. Topics include basic electrical principles and practices, blueprint interpretation, industrial safety procedures, and residential wiring operations.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (22 Credit Hours)		<b>Credit Hours</b>
ELTR 1020	Electrical Systems Basics I	3
ELTR 1060	Electrical Prints, Schematics, and Symbols	3
ELTR 1205	Residential Wiring I	4
ELTR 1210	Residential Wiring II	4
IDFC 1007	Industrial Safety Procedures	2
IDFC 1011	Direct Current I	3
MATH 1012	Foundations of Mathematics	3

**Total Credit Hours: 22 Minimum Credit Hours for Graduation** 

### GAS METAL ARC WELDER (GM31) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The Gas Metal Arc Welder Technical Certificate of Credit prepares students for welding careers in the MIG process. Topics include an introduction to welding technology, oxyfuel cutting techniques, and MIG welding techniques and processes.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (13 Credit Hours)		<b>Credit Hours</b>
WELD 1000	Introduction to Welding Technology	3
WELD 1010	Oxyfuel Cutting	3
WELD 1090	Gas Metal Arc Welding	4
Choose o	ne of the following courses:	
WELD 1150	Advanced Gas Tungsten Arc Welding	3
WELD 1151	Fabrication Processes	(3)
WELD 1152	Pipe Welding	(3)
WELD 1153	Flux Cored Arc Welding	(4)
WELD 1154	Plasma Cutting	(3)
WELD 1156	Ornamental Iron Works	(3)
WELD 1030	Blueprint Reading for Welding Technology	(3)
WELD 1156	Flat Shielded Metal Arc Welding	(4)

### **Total Credit Hours: 13 Minimum Credit Hours for Graduation**

### GAS TUNGSTEN ARC WELDER (GTA1) CERTIFICATE

### Campus Availability:

• Walker County Campus

### **Program Description:**

The Gas Tungsten Arc Welder Technical Certificate of Credit provides instruction to TIG welding techniques. Topics include understanding the nature and culture of the welding industry, oxyfuel cutting techniques, and TIG welding processes.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (13 Credit Hours)		<b>Credit Hours</b>
WELD 1000	Introduction to Welding Technology	3
WELD 1010	Oxyfuel Cutting	3
WELD 1110	Gas Tungsten Arc Welding	4
Choose o	ne of the following courses:	
WELD 1150	Advanced Gas Tungsten Arc Welding	3
WELD 1151	Fabrication Processes	(3)
WELD 1152	Pipe Welding	(3)
WELD 1153	Flux cored Arc Welding	(4)
WELD 1154	Plasma Cutting	(3)
WELD 1156	Ornamental Iron Works	(3)
WELD 1030	Blueprint Reading for Welding Technology	(3)
WELD 1156	Flat Shielded Metal Arc Welding	(4)

**Total Credit Hours: 13 Minimum Credit Hours for Graduation** 

### INDUSTRIAL ELECTRICIAN (IE41) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

The Industrial Electrician Technical Certificate of Credit prepares students for employment using basic electrical maintenance skills. Instruction is provided in the occupational areas of industrial safety, direct and alternating current principles, and industrial wiring.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

### **Required Courses (9 Credit Hours)**

IDSY 1100Basic Circuit AnalysisIDSY 1130Industrial Wiring

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5 4

**Total Credit Hours: 9 Minimum Credit Hours for Graduation** 

### INDUSTRIAL FLUID POWER TECHNICIAN (IF11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

Walker County Campus

### **Program Description:**

The Industrial Fluid Power Technician Technical Certificate program prepares students to inspect, maintain, service, and repair industrial mechanical systems, fluid power systems, and pumps and piping systems. Topics include safety procedures, mechanics, fluid power, and pumps and piping system maintenance.

### **Entrance Requirements:**

Education: High school diploma or GED<sup>®</sup> is not required.

Required Courses (12 Credit Hours)		Credit Hours
IDSY 1170	Industrial Mechanics	6
IDSY 1190	Fluid Power and Piping Systems	6

**Total Credit Hours: 12 Minimum Credit Hours for Graduation** 

### INDUSTRIAL MOTOR CONTROL TECHNICIAN (IM41) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The Industrial Motor Control Technician Technical Certificate of Credit provides training in the maintenance of industrial motor controls. Topics include DC and AC motors, basic, advanced, and variable speed motor controls, and magnetic starters and braking.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required	Courses	(10 Credit	t Hours)

### Credit Hours

IDSY 1110	Industrial Motor Controls I		5
IDSY 1210	Industrial Motor Controls I	I	5

### **Total Credit Hours: 10 Minimum Credit Hours for Graduation**

### INDUSTRIAL SYSTEMS FUNDAMENTALS (IS61) CERTIFICATE

### **Campus Availability:**

Walker County Campus

### **Program Description:**

The Industrial Systems Fundamentals Technical Certificate of Credit is an introductory program preparing students for employment in a variety of positions in industrial systems production equipment maintenance. Basic skills provide for opportunities to upgrade or for entry level employment.

Entrance Date: Fall Semester

Required Courses (14 Credit Hours)		Credit Hours
COMP 1000	Introduction to Computers	3
IDFC 1007	Industrial Safety Procedures	2
IDFC 1011	Direct Current I	3
IDFC 1012	Alternating Current I	3
MATH 1013	Algebraic Concepts	3

**Total Credit Hours: 14 Minimum Credit Hours for Graduation** 

### INSTRUMENTATION AND CONTROLS TECHNICIAN I (IA31) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

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

### Entrance Date: Fall Semester

<b>Required Co</b>	ourses (35 Credit Hours)	Credit Hours
COMP 1000	Introduction to Computers	3
IDFC 1007	Industrial Safety Procedures	2
IDSY 1100	Basic Circuit Analysis	5
IDSY 1110	Industrial Motor Controls I	5
IDSY 1120	Basic Industrial PLC's	6
IDSY 1210	Industrial Motor Controls II	5
IDSY 1230	Industrial Instrumentation	6
IDSY 1020	Print Reading and Problem Solving	3

**Total Credit Hours: 35 Minimum Credit Hours for Graduation** 

### INSTRUMENTATION AND CONTROLS TECHNICIAN II (IA41) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Instrumentation and Controls Technician II certificate builds on the curriculum completed from the Instrumentation and Controls Technician I certificate.

### Entrance Date: Fall Semester

<b>Required</b> Co	ourses (30 Credit Hours)	<b>Credit Hours</b>
IDSY 2750	Human Machine Interface	4
IDSY 2800	Advanced Process Control	4
ICET 2080	Final Control Elements	4
IDSY 2830	Networking Industrial Equipment	4
ICET 2040	Fundamentals of Pressure, Temperature, Flow, and Level	5
IDSY 2850	Industrial Graphical Communication	4
ICET 2060	Instrumentation Maintenance and Calibration	5

### **Total Credit Hours: 30 Minimum Credit Hours for Graduation**

### LATHE OPERATOR (LP11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Lathe Operator certificate prepares the student to use lathes, lathe setup, and lathe tool grinding. Upon completion, the student will be able to cut threads, bore a hole to precise measurements, and cut tapers.

Entrance Date: Fall Semester

Required Courses (15 Credit Hours)		Credit Hours
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1119	Lathe Operations I	4
MCHT 1219	Lathe Operations II	4

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

### MECHANICAL MAINTENANCE TECHNICIAN (MM31) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Polk County Campus

### **Program Description:**

The Mechanical Maintenance Technician Technical Certificate of Credit provides instruction in industrial mechanical and machine tool disciplines. Completion will qualify graduates employment in commercial and industrial industries.

### Entrance Date: Fall Semester

<b>Required Co</b>	ourses (30 Credit Hours)	Credit Hours
IDSY 1170	Industrial Mechanics	6
IDSY 1190	Fluid Power and Piping Systems	6
MCHT 1011	Introduction to Machine Tool	4
MCHT 1119	Lathe Operations I	4
MCHT 1120	Mill Operations I	4
WELD 1040	Flat Shielded Metal Arc Welding	4
WELD 1330	Metal Welding and Cutting Techniques	2

### Total Credit Hours: 30 Minimum Credit Hours for Graduation

### MILL OPERATOR (MP11) CERTIFICATE

### **Campus Availability:**

• Floyd County Campus

### **Program Description:**

The Mill Operator certificate teaches students to effectively operate milling machines. Students become proficient in blueprint reading, general mathematics, and are provided the necessary knowledge and skills to obtain employment as a milling machinist.

Entrance Date: Fall Semester

Required Courses (15 Credit Hours)		Credit Hours
MCHT 1011	Introduction to Machine Tool	4
MCHT 1012	Blueprint for Machine Tool	3
MCHT 1120	Mill Operations I	4
MCHT 1220	Mill Operations II	4

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

### PROCESS CONTROL TECHNICIAN I (PC61) CERTIFICATE

### **Campus Availability:**

• Walker County Campus

### **Program Description:**

The Process Control Technician certificate program offers instruction in the theory and practical application of motor and variable speed controls, industrial PLCs, and industrial fluid power systems. Completion of the program is profitable for entry-level employment or for upgrading technical skills.

Entrance Date: Beginning of any semester

### **Entrance Requirements:**

**Age:** Minimum of 16 years of age

**Assessment Results:** Applicants must achieve minimum scores in reading, writing, and numeric skills on the entrance test. Applicants failing to attain minimum scores may receive refresher/remedial instruction through the Learning Support program at GNTC in order to meet admission requirements. Previous training and/or education may be evaluated to provide advanced placement in the program.

Required Courses (17 Credit Hours)		Credit Hours
IDSY 1120	Basic Industrial PLCs	6
IDSY 1190	Fluid Power and Piping Systems	6
IDSY 1210	Industrial Motor Controls II	5

### **Total Credit Hours: 17 Minimum Credit Hours for Graduation**

### PROGRAMMABLE CONTROL TECHNICIAN I (PC81) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus
- Whitfield Murray Campus

### **Program Description:**

Designed to offer specialized programmable controller training to qualified industrial technicians, this program consists of instruction selected for the Industrial Systems Technology diploma program. Course work addresses operational theory, systems terminology, and field wiring/installation. It also develops operational skills in the use of PLC equipment and peripheral devices with emphasis on programmable logic controller programming, installations, and troubleshooting/repair.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (17 Credit Hours)		Credit Hours
IDSY 1110	Industrial Motor Controls I	5
IDSY 1120	Basic Industrial PLC's	6
IDSY 1220	Intermediate Industrial PLC's	6

**Total Credit Hours: 17 Minimum Credit Hours for Graduation** 

### PROGRAMMABLE CONTROL TECHNICIAN II (PC91) CERTIFICATE

### **Campus Availability:**

• Walker County Campus

### **Program Description:**

The Programmable Control Technician II program is designed to offer specialized programmable controller training to qualified industrial technicians, this program consists of instruction selected for the Industrial Systems Technology diploma program. Course work addresses operational theory, systems terminology, and field wiring/installation. Emphasis is placed on the use of PLC equipment and peripheral devices with a concentration in PLC programming, installation, troubleshooting, and repair.

### Entrance Date: Fall Semester

### **Required Courses (11 Credit Hours)**

## Credit Hours

IDSY 1210	Industrial Motor Controls II
IDSY 1230	Industrial Instrumentation

**Total Credit Hours: 11 Minimum Credit Hours for Graduation** 

### ROBOTIC TECHNICIAN (RT41) CERTIFICATE

### **Campus Availability:**

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The Robotic Technician technical certificate of credit program is designed for the students who wish to enhance their automation skills for employment at companies who have robots. The program provides learning opportunities that introduce, develop and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. The certificate provides opportunities to retrain or upgrade present knowledge and skill. This certificate is designed for students or employees who have a background in Industrial Electronics including, industrial wiring, motors, controls, Plc's, instrumentation, and computers. Graduates of the certificate program receive a Robotic Technician certificate that qualifies them for employment as robotic automation technician.

**Entrance Date:** Beginning of any semester

<b>Required Co</b>	ourses (23 Credit Hours)	Credit Hours
AUMF 1150	Introduction to Robotics	3
AUMF 2060	Work Cell Design Laboratory	2
IDSY 1120	Basic Industrial PLC's	6
IDSY 1190	Fluid Power and Piping Systems	6
IDSY 1220	Intermediate Industrial PLC's	6

**Total Credit Hours: 23 Minimum Credit Hours for Graduation** 

### VERTICAL SHIELDED METAL ARC WELDER FABRICATOR (VSM1) CERTIFICATE

### Campus Availability:

- Floyd County Campus
- Walker County Campus

### **Program Description:**

The Vertical Shielded Metal Arc Welding Fabricator technical certificate of credit prepares students for careers in shielded metal arc welding fabrication.

### **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required. **Entrance Date:** Fall Semester

Required Courses (11 Credit Hours)		<b>Credit Hours</b>
WELD 1050	Horizontal Shielded Metal Arc Welding	4
WELD 1060	Vertical Shielded Metal Arc Welding	4
Choose o	ne of the following courses:	
WELD 1030	Blueprint Reading for Welding Technology	3
WELD 1040	Flat Shielded Metal Arc Welding	(4)
WELD 1153	Flux Cored Arc Welding	(4)
WELD 1154	Plasma Cutting	(3)
WELD 1156	Ornamental Iron Works	(3)

**Total Credit Hours: 11 Minimum Credit Hours for Graduation** 

### **Public Service Technologies**

Georgia Northwestern Technical College (GNTC) is sensitive to the need for qualified persons in the various fields of human services. The Public Service Technologies Division offers degree, diploma, and certificate programs geared to prepare students for such opportunities. These programs combine classroom instruction, laboratory practice, and practicum experience to ensure that students obtain the most current skills required by their chosen profession. Students interested in Public Service programs should see specific program information in this catalog for admission requirements and visit or call the Student Success Center to discuss these requirements and program entry dates. The college reserves the right to cancel courses due to inadequate enrollment. The following is a list of degree, diploma, and certificate programs that GNTC offers in this division. All programs are not offered on all college campuses. The letters following the program names identify the campuses or location where the programs are taught: (F-Floyd County Campus; G-Gordon County Campus; P-Polk County Campus; W-Walker County Campus; and WM-Whitfield Murray Campus).

### Associate of Applied Science Degree Programs

Criminal Justice Technology (CJT3) - G, W, WM Culinary Arts (CA43) - F Early Childhood Care and Education (EC13) - G, P, W Fire Science Technology (FS13) - G Social Work Assistant (SW23) - W

### **Diploma Programs**

Cosmetology (CO12) - F, G, P, W Criminal Justice Technology (CJT2) - G, W, WM Culinary Arts (CA44) - F Early Childhood Care and Education (ECC2) - G, P, W Fire Science Technology (FST2) - G Firefighter/EMSP (FI12) - G Social Work Assistant (SW12) - W

### **Technical Certificate of Credit Programs**

Basic Fire Company Officer (BF11) - G Basic Law Enforcement (BL11) - G CDA Preparation TCC (CE71) - F, G, P, W Child Development Specialist (CD61) - F, G, P, W Crime Scene Investigation (CB71) - P, W, WM Criminal Justice Specialist (CJ21) - F, G, W, WM Early Childhood Care and Education Basics (EC31) - F, G, P, W Early Childhood Exceptionalities (EC41) - G, P, W Early Childhood Program Administration (ECP1) - F, G, P, W Eligibility Determination Specialist (ED11) - W Family Child Care Specialist (FC21) - G, P Fire Fighter I (FF11) - G Fire Fighter II (FF21) - G Fire Officer I (FF31) - G Fire Officer II (FF51) - G Food Production Worker I (FPW1) - F Infant/Toddler Child Care Specialist (IC31) - F, G, P, W Nail Technician (NT11) - W Shampoo Technician (ST11) - F, G, P, W

Program lengths vary based on program type and number of hours taken each semester.

Associate degrees are  $1\frac{1}{2}$  to 2 years in length, diploma programs are 1 to 1  $\frac{1}{2}$  years in length, and certificate lengths vary from 1 to 4 semesters. Individual program descriptions identify specifics. Most courses are offered day and evening. Students completing courses only in evening will normally take longer to complete a program.

### CRIMINAL JUSTICE TECHNOLOGY (CJT3) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Gordon County Campus
- Walker County Campus
- Whitfield Murray Campus

### Program Description:

The Criminal Justice Technology associate degree program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology associate degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology associate degree does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

General Education Core (15 Credit Hours)*		<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social Sciences/Behavioral Sciences Elective	3 3 3 3
XXXX xxxx	General Education Core Elective	3
MATH 1100 or	Quantitative Skills and Reasoning	3
MATH 1101	Mathematical Modeling	(3)
or MATH 1111	College Algebra	(3)
Occupationa	al Curriculum (45 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3 3 3 3 3 3 3 3
CRJU 1400	Ethics and Cultural Perspectives for Criminal Justice	3
CRJU 2050	Criminal Procedure	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law for Criminal Justice	3
CRJU 2070	Juvenile Justice	3
CRJU 2090	Criminal Justice Practicum	3
or		
CRJU 2100	Criminal Justice Externship	(3)
XXXX xxxx	Occupational Related Electives	15
(9 of the elective hours must be CRJU and/or FOSC courses and 3 hours must be approved by advisor)		

### Total Credit Hours: 60 Minimum Credit Hours for Graduation

### CULINARY ARTS DEGREE (CA43) ASSOCIATE OF APPLIED SCIENCE DEGREE

### Campus Availability:

### • Floyd County Campus

### **Program Description:**

The Culinary Arts Degree 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 Degree. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the culinary field as cooks, bakers, or caterers/culinary managers.

Entrance Dates: Beginning of any semester. Fall semester for occupational courses

ENGL 1101Composition and Rhetoric3XXXX xxxxHumanities/Fine Arts Elective3XXXX xxxxSocial Sciences/Behavioral Sciences Elective3MATH 1100Quantitative Skills and Reasoning3or00MATH 1101Mathematical Modeling(3)
or
or
or
MATH 1101 Mathematical Modeling (3)
or
MATH 1111 College Algebra (3)
XXXX xxxx General Education Core Elective 3
Occupational Curriculum (47 Credit Hours) Credit Hours
COMP 1000 Introduction to Computers 3
CUUL 1000 Fundamentals of Culinary Arts 4
CUUL 1110 Culinary Safety and Sanitation 4
CUUL 1120 Principles of Cooking 4
CUUL 1220 Baking Principles 4
CUUL 1320 Garde Manger 4
CUUL 1129 Fundamentals of Restaurant Operations 4
CUUL 2130 Culinary Practicum and Leadership 6
or
CUUL 2140 Advanced Baking and International Cuisine (6)
CUUL 1370 Culinary Nutrition and Menu Development 4
CUUL 2160 Contemporary Cuisine 4
CUUL xxxx Culinary/Hospitality Related Elective 6
(See advisor for recommended list)

### Total Credit Hours: 62 Minimum Credit Hours for Graduation

### EARLY CHILDHOOD CARE AND EDUCATION (EC13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

- Gordon County Campus
- Polk County Campus
- Walker County Campus

### **Program Description:**

The Early Childhood Care/Education associate of applied science degree program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions. Graduates of this program will receive one of six areas of specialization: exceptionalities, infant/toddler, program administration, paraprofessional, school age, or family child care.

**Entrance Requirements:** Prior to enrolling in a lab course (ECCE 1121, 2240), students must provide the following documentation: (1) A satisfactory criminal record check, (2) CPR/First Aid certification.

General Edu	cation Core (Minimum 18 Credit Hours)*	<b>Credit Hours</b>
ENGL 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3 3 3 3
XXXX xxxx	Language Arts/Communication Elective	3
PSYC 1101	Introductory Psychology	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
	College Algebra	(3)
XXXX xxxx	General Education Core Elective	3
Occupation	al Curriculum (48 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112		
	Curriculum and Assessment	3
ECCE 1113	Curriculum and Assessment Creative Activities for Children	3 3
	Creative Activities for Children	3 3 3
ECCE 1113		3 3 3 3
ECCE 1113 ECCE 2115	Creative Activities for Children Language and Literacy	3 3 3 3 3 3
ECCE 1113 ECCE 2115 ECCE 2201	Creative Activities for Children Language and Literacy Exceptionalities	3 3 3 3 3 3 3
ECCE 1113 ECCE 2115 ECCE 2201 ECCE 2202	Creative Activities for Children Language and Literacy Exceptionalities Social Issues and Family Involvement	3 3 3 3 3 3 3 3
ECCE 1113 ECCE 2115 ECCE 2201 ECCE 2202 ECCE 2203	Creative Activities for Children Language and Literacy Exceptionalities Social Issues and Family Involvement Guidance and Classroom Management	3 3 3 3 3 3 3 3 3 3 3 3 3 3 12

(Program requirements continued on following page)

### EARLY CHILDHOOD CARE & EDUCATION (CONT.)

#### And completion of one of the following specializations (6 Credit Hours): **Exceptionalities Specialization (6 credit hours)** ECCE 2360 Classroom Strategies for Exceptional Children 3 3 ECCE 2362 Exploring Your Role in the Exceptional Environment OR Family Child Care Specialization (6 credit hours) ECCE 2340 Family Child Care Program Management 3 ECCE 2342 Family Child Care Business Management 3 OR Infant and Toddler Specialization (6 credit hours) ECCE 2330 Infant/Toddler Development 3 ECCE 2332 Infant/Toddler Group Care and Curriculum 3 OR Paraprofessional Specialization (6 credit hours) ECCE 2310 Paraprofessional Methods and Materials 3 ECCE 2312 Paraprofessional Roles and Practices 3 OR Program Administration Specialization (6 credit hours)

ECCE 2320	Program Administration and Facility Management	3
ECCE 2322	Personnel Management	3

### OR

# School Age and Youth Care Specialization (6 credit hours)ECCE 2350Early Adolescent Development3ECCE 2352Designing Programs and Environments for School Age<br/>Children and Youth3

### **Total Credit Hours: 72 Minimum Credit Hours for Graduation**

### FIRE SCIENCE TECHNOLOGY (FS13) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Gordon County Campus

### **Program Description:**

The Fire Science Associate of Applied Science Technical degree program is a sequence of courses designed to prepare fire service personnel at all levels to become better officers and leaders. 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 retrain and upgrade present knowledge and skills. Completion of the program of study leads to an AAS degree in Fire Science.

### **Entrance Requirements:**

Age: Minimum of 18 years of age

**Other:** A medical physical examination may be required.

General Education Core (15 Credit Hours)*		Credit Hours
ENG 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social Sciences/Behavioral Sciences Elective	3 3 3 3
XXXX xxxx	General Education Core Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
Occupation	al Curriculum (47 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
FRSC 1100	Introduction to the Fire Service	3
FRSC 1110	Fire Administration-Supervision and Leadership	3 3 3
FRSC 1121	Firefighting Strategy and Tactics	
FRSC 1132	Fire Service Instructor	4
FRSC 1141	Hazardous Materials Operations	4
FRSC 1151	Fire Prevention and Inspection	4
FRSC 1161	Fire Service Safety and Loss Control	3
FRSC 2100	Fire Administration-Management	3
FRSC 2110	Fire Service Hydraulics	3
FRSC 2120	Fire Protection Systems	3 3 3 3 3
FRSC 2130	Fire Service Building Construction	3
FRSC 2141	Incident Command	4
FRSC 2170	Fire and Arson Investigation	4

### **Total Credit Hours: 62 Minimum Credit Hours for Graduation**

### SOCIAL WORK ASSISTANT (SW23) ASSOCIATE OF APPLIED SCIENCE DEGREE

### **Campus Availability:**

• Walker County Campus

### **Program Description:**

The Social Work Assistant Program is designed to prepare individuals to obtain entry-level employment in public and private social service agencies. The social worker assistant is equipped with the skills, knowledge, values, and sensitivity to effectively serve human needs in a variety of community settings. Students have the option to select courses that will prepare them to provide client services, as well as support for families in a variety of fields, such as psychology, rehabilitation, and social work. They may assist clients in identifying social and community services that will best assist them. They may assist the social worker in developing, organizing, and conducting programs to resolve problems relevant to human relations, substance abuse, adult day care, and rehabilitation.

General Edu	ication Core (15 Credit Hours)*	<b>Credit Hours</b>
ENG 1101	Composition and Rhetoric	3
XXXX xxxx	Humanities/Fine Arts Elective	3
XXXX xxxx	Social Sciences/Behavioral Sciences Elective	3 3 3 3
XXXX xxxx	General Education Core Elective	3
MATH 1100	Quantitative Skills and Reasoning	3
or		
MATH 1101	Mathematical Modeling	(3)
or		
MATH 1111	College Algebra	(3)
Occupation	al Curriculum (48 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
SOCW 2000	Introduction to Social Work	3
SOCW 2010	5	3 3 3 3 3 3 3 3 3 3 3
SOCW 2020		3
SOCW 2030	Interviewing Techniques with Individuals	3
SOCW 2040	Behavioral Health and Community Service	3
SOCW 2050	Group Work Intervention	3
SOCW 2060	Child and Adolescent Behaviors and Interventions	3
SOCW 2070	Social Policies and Programs for the Aging	
SOCW 2080		6
SOCW 2090		6
SOCW 2100	Leadership and Community Service	3
or		
SOCW 2110	Case Management with Families	(3)
or		(2)
	Multicultural Issues	(3)
Or	Casial Waltana and Community Comiss	(2)
SOCW 2130	,	(3)
XXXX xxxx	General Education Core Electives	6

### Total Credit Hours: 63 Minimum Credit Hours for Graduation

#### COSMETOLOGY (CO12) DIPLOMA

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

## Program Description:

The Cosmetology program is a sequence of courses that prepares students for careers in the field of cosmetology. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, chemistry, anatomy and physiology, skin, hair, and nail diseases and disorders, hair treatments and manipulations, hair shaping, hair styling, artificial hair, braiding/intertwining hair, chemical reformation and application, skin and nail care, hair coloring, hair lightening, reception, sales, management, math, reading, writing, interpersonal relations development, computer skills, employability skills, and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates receive a Cosmetology diploma and are employable as a cosmetology salesperson, cosmetologist, salon manager, or a salon owner.

#### **Entrance Dates:**

Fall and spring semesters (Floyd/Polk when openings are available: Day Program) Winter and summer semesters (Polk-Night Program) Fall and winter semesters (Walker)

**Program Final Exit Point:** Law requires graduates who complete the program to pass the Georgia State Board of Cosmetology Examination in order to obtain licenses to work as cosmetologists.

<b>Basic Skills</b>	<b>Credit Hours</b>	
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations and Professional Development	2
Occupation	al Curriculum (46 Credit Hours)	<b>Credit Hours</b>
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1010	Chemical Texture Services	3
COSM 1020	Hair Care and Treatment	2
COSM 1030	Haircutting	3
COSM 1040	Styling	3
COSM 1050	Hair Color	3
COSM 1060	Fundamentals of Skin Care	3
COSM 1070	Nail Care and Advanced Techniques	3
COSM 1080	Cosmetology Practicum I	4
COSM 1090	Cosmetology Practicum II	4
COSM 1100	Cosmetology Practicum III	4
COSM 1110	Cosmetology Practicum IV	4
COSM 1120	Salon Management	3
COMP 1000	Introduction to Computers	3

#### **Total Credit Hours: 54 Minimum Credit Hours for Graduation**

#### CRIMINAL JUSTICE TECHNOLOGY (CJT2) DIPLOMA

## **Campus Availability:**

- Gordon County Campus
- Walker County Campus
- Whitfield Murray Campus

## **Program Description:**

The Criminal Justice Technology diploma program is a sequence of courses that prepares students for Criminal Justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Program graduates receive a Criminal Justice Technology diploma. Graduates who are current practitioners will benefit through enhancement of career potential. Entry-level persons will be prepared to pursue diverse opportunities in the corrections, security, investigative, and police administration fields. Completion of the Criminal Justice Technology diploma does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

<b>Basic Skills</b>	Courses (9 Credit Hours)	<b>Credit Hours</b>	
ENGL 1010	Fundamentals of English I	3	
MATH 1012	Foundations of Mathematics	3	
PSYC 1010	Basic Psychology	3	
<b>Occupation</b>	al Curriculum (39 Credit Hours)	<b>Credit Hours</b>	
COMP 1000	Introduction to Computers	3	
CRJU 1010	Introduction to Criminal Justice	3	
CRJU 1030	Corrections	3	
CRJU 1040	Principles of Law Enforcement	3	
CRJU 1068	Criminal Law for Criminal Justice	3	
CRJU 1400	Ethics and Cultural Perspectives for Criminal Justice	3	
CRJU 2020	Constitutional Law for Criminal Justice	3	
CRJU 2050	Criminal Procedure	3	
CRJU 2070	Juvenile Justice	3 3	
CRJU 2090	Criminal Justice Practicum	3	
or			
CRJU 2100	Criminal Justice Externship	(3)	
XXXX xxxx	Occupational related electives	9	
(6 of the elective hours must be CRJU and/or FOSC courses and the remaining 3 hours must be approved by advisor)			

## Total Credit Hours: 48 Minimum Credit Hours Required for Graduation

#### CULINARY ARTS (CA44) DIPLOMA

#### **Campus Availability:**

• Floyd County Campus

#### Program Description:

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.

**Entrance Dates:** Beginning of any semester for core courses. Fall semester for occupational courses.

Basic Skills	<b>Credit Hours</b>	
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (41 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	4
CUUL 1120	Principles of Cooking	4
CUUL 1129	Fundamentals of Restaurant Operations	4
CUUL 1220	Baking Principles	4
CUUL 1320	Garde Manger	4
CUUL 2160	Contemporary Cuisine	4
CUUL 1370	Culinary Nutrition and Menu Development	4
CUUL 2130	Culinary Practicum and Leadership	6
or		
CUUL 2140	Advanced Baking and International Cuisine	(6)

#### **Total Credit Hours: 49 Minimum Credit Hours for Graduation**

# EARLY CHILDHOOD CARE AND EDUCATION (ECC2) DIPLOMA

## **Campus Availability:**

- Gordon County Campus
- Polk County Campus
- Walker County Campus

## Program Description:

The Early Childhood Care and Education program is a sequence of courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes a combination of early childhood care and education theory and practical application as well as limited general core competencies necessary for successful employment. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

**Requirements:** Prior to enrolling in a lab course (ECCE 1121,ECCE 2240), students must provide the following documentation: (1) A satisfactory criminal record check; (2) CPR/First Aid certification.

Basic Skills	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)
MATH 1012	Foundations of Mathematics	3
Occupation	al Curriculum (45 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
ECCE 1113	Creative Activities for Children	3
ECCE 1121	Early Childhood Care and Education Practicum	3
ECCE 2115	Language and Literacy	3
ECCE 2116	Math and Science	3
ECCE 2202	Social Issues & Family Involvement	3
ECCE 2203	Guidance and Classroom Management	3
ECCE 2240	Early Childhood Care and Education Internship	12

#### **Total Credit Hours: 53 Minimum Credit Hours Required for Graduation**

#### FIRE SCIENCE TECHNOLOGY (FST2) DIPLOMA

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Fire Science Diploma program is a sequence of courses designed to prepare fire service personnel at all levels to become better officers and leaders. 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 retrain and upgrade present knowledge and skills.

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
PSYC 1010	Basic Psychology	(3)

Occupation	al Curriculum (47 Credit Hours)	Credit Hours
COMP 1000	Introduction to Computers	3
FRSC 1100	Introduction to the Fire Service	3
FRSC 1110	Fire Administration-Supervision and Leadership	3
FRSC 1121	Fire Fighting Strategy & Tactics	3
FRSC 1132	Fire Service Instructor	4
FRSC 1141	Hazardous Materials Operations	4
FRSC 1151	Fire Prevention and Inspection	4
FRSC 1161	Fire Service Safety and Loss Control	3
FRSC 2100	Fire Administration-Management	3
FRSC 2110	Fire Service Hydraulics	3
FRSC 2120	Fire Protection Systems	3
FRSC 2130	Fire Service Building Construction	3
FRSC 2141	Incident Command	4
FRSC 2170	Fire and Arson Investigations	4

**Total Credit Hours: 55 Minimum Credit Hours for Graduation** 

#### FIREFIGHTER/EMSP (FI12) DIPLOMA

## **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Firefighter/Emergency Medical Services Professional diploma program is designed to prepare students for entry level employment in the public safety areas of fire service and emergency medical services. Upon completion of the Firefighter/ Emergency Medical Services Professional diploma, students may be eligible for certification and/or licensure in the following areas: Firefighter I, Firefighter II EMT and AEMT.

<b>Basic Skills</b>	Courses (6 Credit Hours)	Credit Hours
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3

Occupation	al Curriculum (57 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
FRSC 1020	Basic Firefighter- Emergency Services Fundamentals	3
FRSC 1030	Basic Firefighter- Module I	5
FRSC 1040	Basic Firefighter- Module II	3
FRSC 1141	Hazardous Materials Operations	4
FRSC 1050	Fire and Life Safety Educator I	3
FRSC 1060	Fire Prevention, Preparedness and Maintenance	3
FRSC 1070	Introduction to Technical Rescue	4
FRSC 1080	Fireground Operations	3
EMSP 1110	Introduction to the EMT Profession	3
EMSP 1120	EMT Assessment/Airway Management & Pharmacology	3
EMSP 1130	Medical Emergencies for the EMT	3
EMSP 1140	Special Patient Populations	3
EMSP 1150	Shock and Trauma for the EMT	3
EMSP 1160	Clinical and Practical Applications for the EMT	1
EMSP 1510	Advanced Concepts for the AEMT	3
EMSP 1520	Advanced Patient Care for the AEMT	3
EMSP 1530	Clinical Applications for the AEMT	1
EMSP 1540	Clinical and Practical Applications for the AEMT	3

#### **Total Credit Hours: 63 Minimum Credit Hours for Graduation**

#### SOCIAL WORK ASSISTANT (SW12) DIPLOMA

#### **Campus Availability:**

• Walker County Campus

#### **Program Description:**

The Social Work Assistant Program is designed to prepare individuals to obtain entry-level employment in public and private social service agencies. The social worker assistant is equipped with the skills, knowledge, values, and sensitivity to effectively serve human needs in a variety of community settings. Students have the option to select courses that will prepare them to provide client services, as well as support for families in a variety of fields, such as psychology, rehabilitation, and social work. They may assist clients in identifying social and community services that will best assist them. They may assist the social worker in developing, organizing, and conducting programs to resolve problems relevant to human relations, substance abuse, adult day care, and rehabilitation.

<b>Basic Skills</b>	Courses (8 Credit Hours)	<b>Credit Hours</b>
ENGL 1010	Fundamentals of English I	3
MATH 1012	Foundations of Mathematics	3
EMPL 1000	Interpersonal Relations and Professional Development	2
Occupation	al Curriculum (48 Credit Hours)	<b>Credit Hours</b>
COMP 1000	Introduction to Computers	3
SOCW 2000	Introduction to Social Work	3
	Introduction to Case Management	3 3 3 3 3 3 3 3 3 3
SOCW 2020	Human Behavior and the Social Environment	3
SOCW 2030	Interviewing Techniques with Individuals	3
SOCW 2040	,	3
SOCW 2050	Group Work Intervention	3
SOCW 2060	Child and Adolescent Behaviors and Interventions	3
	Social Policies and Programs for the Aging	3
SOCW 2080	Social Work Field Practicum I	6
SOCW 2090	Social Work Field Practicum II	6
SOCW 2100 or	Leadership and Community Service	3
SOCW 2110 or	Case Management with Families	(3)
SOCW 2120 or	Multicultural Issues	(3)
SOCW 2130	Social Welfare and Community Service	(3)
PSYC 1010	Basic Psychology	3 3
XXXX xxxx	Guided Elective	3

#### **Total Credit Hours: 56 Minimum Credit Hours for Graduation**

#### BASIC FIRE COMPANY OFFICER (BF11) CERTIFICATE

## **Campus Availability:**

• Gordon County Campus

## **Program Description:**

Exit examination can be administered for Basic Fire Company Officer after theses courses have been successfully completed and the respective task book has been completed. If the exit examination and task book are successfully completed, the candidate will be issued an NPQ Certification Application through GFSTC.

Required Courses (13 Credit Hours)		Credit Hours
FRSC 1121	Firefighting Strategy and Tactics	3
FRSC 2110	Fire Service Hydraulics	3
FRSC 2130	Fire Service Building Construction	3
FRSC 2141	Incident Command	4

**Total Credit Hours: 13 Minimum Credit Hours for Graduation** 

#### BASIC LAW ENFORCEMENT (BL11) CERTIFICATE

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Basic Law Enforcement certificate program provides students with the necessary skills, standards, and knowledge in order to become qualified, proficiency trained, ethical and competent peace officers in criminal justice careers. Successful completion of the program will make the student eligible to be certified as a Georgia Peace Officer.

#### **Entrance Requirements:**

Age: Minimum of 18 years of age.

**Other:** Applicants must also be accepted into the academy by the Georgia Peace Officers Standards and Training Council. Requirements include a satisfactory criminal background investigation; Georgia Crime Information Center (GCIC) and National Crime Information Center (NCIC) fingerprint checks; completion of a physician's affidavit; and a certified driver history and criminal history report.

#### **Required Courses (42 Credit Hours)**

#### **Credit Hours**

LETA	1010	Health & Life Safety for Basic Law Enforcement	2
LETA	1012	Ethics and Liability for Basic Law Enforcement	2
LETA	1014	Firearms Training for Basic Law Enforcement	4
LETA	1016	Emergency Vehicle Operations for Basic Law Enforcement	4
LETA	1018	Defensive Tactics for Basic Law Enforcement	2
LETA	1020	Police Patrol Operations for Basic Law Enforcement	4
LETA	1022	Methods of Criminal Investigation for Basic Law Enforcement	4
LETA	1024	Criminal Law for Criminal Justice for Basic Law Enforcement	4
LETA	1026	Criminal Procedure for Basic Law Enforcement	4
LETA	1028	Police Traffic Control and Investigation for Basic	
		Law Enforcement	3
LETA	1030	Principles of Law Enforcement for Basic Law Enforcement	3
LETA	1032	Introduction to Criminal Justice for Basic Law Enforcement	3
LETA	1034	Constitutional Law for Criminal Justice for Basic	
		Law Enforcement	3

**Total Credit Hours: 42 Minimum Credit Hours for Graduation** 

#### CDA PREPARATION TCC (CE71) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Early Childhood Care and Education CDA Preparation TCC (Child Development Associate Preparation) program is a four course sequence of courses designed to prepare students for the Child Development Associate national credential issued by the Council for Professional Recognition (out of Washington DC). The four courses in this TCC provide students with the knowledge and skills needed for the national credential and provide information on the development of the portfolio required of the Council. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, Georgia Pre-K programs, and elementary school paraprofessional positions.

#### **Required Courses (11 Credit Hours)**

#### **Credit Hours**

ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1125	Professionalism Through CDA Certificate Preparation	2

#### Total Credit Hours: 11 Minimum Credit Hours for Graduation

#### CHILD DEVELOPMENT SPECIALIST (CD61) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Early Childhood Care and Education Child Development Specialist TCC is a sequence of five courses designed to prepare students for a variety of careers in the field of early childhood education. The program emphasizes the basics needed for a career in early childhood, but this TCC also includes more content about planning curriculum and working in the field. In addition, the student may complete a practicum and work in a child care program. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

Age: Minimum of 19 years of age

**Education:** Post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience pending approval of the division chair.

Required Co	ourses (14 Credit Hours)	<b>Credit Hours</b>
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth and Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 1112	Curriculum and Assessment	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
ECCE 1121	Early Childhood Care and Education Practicum	(3)

#### Total Credit Hours: 14 Minimum Credit Hours Required for Graduation

#### CRIME SCENE INVESTIGATION (CB71) CERTIFICATE

## **Campus Availability:**

- Polk County Campus
- Walker County Campus
- Whitfield Murray Campus

## **Program Description:**

The Crime Scene Investigation Technical Certificate of Credit begins to introduce students to various careers in the rapidly growing field of forensic science. Students will gain introductory exposure to knowledge and skills that may encourage further academic preparation in careers in forensic technology in areas such as crime scene investigation, death investigation, laboratory technology, evidence technology, forensic computer science, and general forensic science or criminal justice fields.

## **Entrance Requirements:**

**Education:** High school diploma or GED<sup>®</sup> is not required.

Required Co	ourses (19 Credit Hours)	Credit Hours
FOSC 1206	Introduction to Forensic Science	3
FOSC 2010	Crime Scene Investigation I	4
FOSC 2011	Crime Scene Investigation II	4
FOSC 2014	Documentation and Report Preparation	4
FOSC 2150	Case Preparation and Courtroom Testimony	4

Total Credit Hours: 19 Minimum Credit Hours for Graduation

#### CRIMINAL JUSTICE SPECIALIST (CJ21) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Walker County Campus
- Whitfield Murray Campus

#### **Program Description:**

The Criminal Justice Specialist Technical Certificate of Credit is a sequence of courses that prepares students for criminal justice professions. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of criminal justice theory and practical application necessary for successful employment. Upon completion of this technical certificate of credit may permit students to pursue entry level opportunities in the criminal justice field. Completion of the Criminal Justice Specialist Technical Certificate of Credit does not ensure certification of officer status in Georgia. Students must seek such certification from the Peace Officer Standards and Training (P.O.S.T.) Council.

#### **Entrance Requirements:**

Age: Minimum of 18 years of age. Education: High school diploma or GED<sup>®</sup> is not required.

Required Co	ourses (15 Credit Hours)	Credit Hours
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1030	Corrections	3
CRJU 1040	Principles of Law Enforcement	3
CRJU 1068	Criminal Law for Criminal Justice	3
CRJU 2020	Constitutional Law for Criminal Justice	3

#### **Total Credit Hours: 15 Minimum Credit Hours for Graduation**

# EARLY CHILDHOOD CARE AND EDUCATION BASICS (EC31) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

## **Program Description:**

The Early Childhood Care and Education (ECCE) Basics TCC includes three basic Early Childhood and Care Education courses that are needed for entry level workers. The program provides an introductory course to the ECCE field, a child growth and development course, and health, safety, and nutrition course. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs. Bright from the Start (BFTS), the regulatory agency in Georgia, requires the basic knowledge included in this TCC for a person to be a lead teacher in a child care center and family day care center.

## **Required Courses (9 Credit Hours)**

#### **Credit Hours**

ECCE 1103 Child	uction to Early Childhood Care and Education Growth and Development , Safety and Nutrition	3 3 3
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Total Credit Hours: 9 Minimum Credit Hours for Graduation

#### EARLY CHILDHOOD EXCEPTIONALITIES (EC41) CERTIFICATE

#### **Campus Availability:**

- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Early Childhood Care and Education Exceptionalities TCC is a sequence of three courses designed to prepare students to work with students with special needs. The program emphasizes an inclusive classroom including strategies and activities for exceptional children (both low and high achieving students). Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

**Age:** Minimum of 19 years of age

**Education:** Post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience pending approval of the division chair.

<b>Required Co</b>	ourses (9 Credit Hours)	<b>Credit Hours</b>
ECCE 2201	Exceptionalities	3
ECCE 2360	Classroom Strategies for Exceptional Children	3
ECCE 2362	Exploring Your Role in the Exceptional Environment	3
Total Credit Hours: 9 Minimum Credit Hours Required for Graduation		

# EARLY CHILDHOOD PROGRAM ADMINISTRATION (ECP1) CERTIFICATE

## **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Early Childhood Care and Education Program Administration TCC program is a sequence of three courses designed to prepare students for a job as manager of a Childcare Learning Center or a Group Day Care Center. The program emphasizes child growth and development and management and administration issues involved in managing a child care center. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

#### Age: Minimum of 21 years of age

**Other:** Previous training and/or education may be evaluated to provide advanced placement in the program. Post-secondary credentials from an accredited institution, or a current Child Development Associate (CDA) certificate, or qualifying experience pending approval of the division chair.

Required Courses (9 Credit Hours)		<b>Credit Hours</b>
ECCE 1103	Child Growth and Development	3
ECCE 2320	Program Administration and Facility Management	3
ECCE 2322	Personnel Management	3

**Total Credit Hours: 9 Minimum Credit Hours for Graduation** 

#### ELIGIBILITY DETERMINATION SPECIALIST (ED11) CERTIFICATE

## Campus Availability:

• Walker County Campus

#### **Program Description:**

The Eligibility Determination Specialist TCC program prepares individuals to work under general supervision to coordinate or perform eligibility determinations and other related activities associated with Medicaid benefits for the aged, blind, and disabled. Additionally, eligibility determination specialists may serve as liaisons with community, state, and federal agencies to coordinate client benefits and services. Although the certificate program was developed in cooperation with the Georgia Division of Family and Children Services (DFCS), program graduates may also find employment in the private sector, providing consultation and technical assistance to nursing homes, hospitals, and rehabilitation services personnel and family members concerning eligibility requirements. The program emphasizes a combination of theory, social work procedures, and interviewing techniques. Students will learn about the economic support component of social work, including Family Medicaid, Food Stamps, and Temporary Assistance for Needy Families (TANF). Preceptors from DFCS will oversee students in the internship phase of the program.

#### **Entrance Requirements:**

Age: Minimum of 18 years of age

#### **Required Courses (25 Credit Hours) Credit Hours** COMP 1000 Introduction to Computers 3 EMPL 1000 2 Interpersonal Relations and Professional Development Fundamentals of English I 3 ENGL 1010 3 SOCW 2010 Introduction to Case Management SOCW 2020 Human Behavior and the Social Environment 3 3 SOCW 2030 Interviewing Techniques with Individuals SOCW 2081 Social Work Field Practicum 8

#### Total Credit Hours: 25 Minimum Credit Hours Required for Graduation

#### FAMILY CHILD CARE SPECIALIST (FC21) CERTIFICATE

## **Campus Availability:**

Gordon County Campus

• Polk County Campus

#### **Program Description:**

The Early Childhood Care and Education Family Child Care Specialist TCC program is a sequence of four courses designed to prepare students for in home family child care. The program emphasizes a combination of early childhood care and education theory and practical application as well as management and regulations for in home family child care. Graduates have qualifications to offer child care in his/her home or to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

Age: Minimum of 18 years of age

<b>Required Co</b>	ourses (15 Credit Hours)	<b>Credit Hours</b>
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth & Development	3
ECCE 1105	Health, Safety, and Nutrition	3
ECCE 2340	Family Childcare Program Management	3
ECCE 2342	Family Childcare Business Management	3
Total Credit Hours: 15 Minimum Credit Hours Required for Graduation		

Total Credit Hours: 15 Minimum Credit Hours Required for Graduation

#### FIRE FIGHTER I (FF11) CERTIFICATE

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Fire Fighter I Technical Certificate of Credit program is conducted in cooperation with the Georgia Fire Academy and Georgia Firefighter Standards and Training to ensure graduates have the skills, knowledge and credentials to serve as firefighters in paid and volunteer fire departments. Graduates will be tested and certified at the National Professional Qualifications level.

# Required Courses (15 Credit Hours)Credit Hours)FRSC 1020Basic Firefighter - Emergency Services Fundamentals3FRSC 1030Basic Firefighter - Module I5FRSC 1040Basic Firefighter - Module II3

11000 10000		5
FRSC 1040	Basic Firefighter - Module II	3
FRSC 1141	Hazardous Materials Operations	4

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

#### FIRE FIGHTER II (FF21) CERTIFICATE

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Firefighter II Technical Certificate of Credit is conducted in cooperation with the Georgia Fire Academy and Georgia Firefighter Standards and Training to ensure graduates have the skills, knowledge and credentials to serve as firefighters in paid and volunteer fire departments. The certificate builds upon skills and knowledge acquired in the Fire Fighter I certificate and parallels the Advanced Firefighter Curriculum being developed by the Georgia Fire Academy. Graduates will have the opportunity to be tested and certified at the National Professional Qualifications Firefighter II level. Note: Candidates must be certified at the NPQ Firefighter I level to be eligible for NPQ Firefighter II certification.

<b>Required Co</b>	ourses (13 Credit Hours)	<b>Credit Hours</b>
FRSC 1050	Fire and Life Safety Educator I	3
FRSC 1060	Fire Prevention, Preparedness, and Maintenance	3
FRSC 1070	Introduction to Technical Rescue	4
FRSC 1080	Fireground Operations	3

#### **Total Credit Hours: 13 Minimum Credit Hours for Graduation**

#### FIRE OFFICER I (FF31) CERTIFICATE

#### **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Fire Officer I Technical Certificate of Credit program is conducted in cooperation with the Georgia Fire Academy and Georgia Firefighter Standards and Training to ensure graduates have the skills, knowledge and credentials to serve as firefighters in paid and volunteer fire departments. Graduates will be tested and certified at the National Professional Qualifications level. Program graduates receive a Fire Officer I Technical Certificate of Credit. Students should be graduates of the Basic Company Officer Technical Certificate of Credit before enrolling in this program.

Occupationa	al Curriculum (14 Credit Hours)	<b>Credit Hours</b>
FRSC 1110	Fire Administration - Supervision and Leadership	3
FRSC 1132	Fire Service Instructor	4
FRSC 1141	Hazardous Materials Operations	4
FRSC 2120	Fire Protection Systems	3

**Total Credit Hours: 14 Minimum Credit Hours for Graduation** 

#### FIRE OFFICER II (FF51) CERTIFICATE

## **Campus Availability:**

• Gordon County Campus

#### **Program Description:**

The Fire Officer Level II Technical Certificate of Credit program is conducted in cooperation with the Georgia Fire Academy and Georgia firefighter Standards and Training to ensure graduates have the skills, knowledge, and credentials to serve as a Fire Company Officer in paid and volunteer fire departments. Upon successful completion of assigned NPQ tasks, graduates will have the opportunity to be tested and certified at the National Professional Qualifications Fire Officer II level. Note: Candidates must be certified at the level of NPQ Fire Officer I to be eligible for NPQ Fire Officer II certification.

Occupation	al Curriculum (14 Credit Hours)	<b>Credit Hours</b>
FRSC 1151	Fire Prevention & Inspection	4
FRSC 1161	Fire Service Safety and Loss Control	3
FRSC 2100	Fire Administration	3
FRSC 2170	Fire and Arson Investigation	4

#### **Total Credit Hours: 14 Minimum Credit Hours for Graduation**

#### FOOD PRODUCTION WORKER I (FPW1) CERTIFICATE

#### **Campus Availability:**

• Floyd County Campus

#### **Program Description:**

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.

Required Courses	(16 Credit Hour	s)
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CUUL 1000	Fundamentals of Culinary Arts	4
CUUL 1110	Culinary Safety and Sanitation	4
CUUL 1120	Principles of Cooking	4
CUUL 1129	Fundamentals of Restaurant Operations	4

#### **Total Credit Hours: 16 Minimum Credit Hours for Graduation**

## INFANT/TODDLER CHILD CARE SPECIALIST (IC31) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### **Program Description:**

The Early Childhood Care and Education Infant/Toddler Child Care Specialist TCC program is a sequence of five courses designed to prepare students with the basics needed for working with infants and toddlers. the program provides an intense look at understanding and learning activities and proper care needed for infants and toddlers. Graduates have qualifications to be employed in early care and education settings including child care centers, Head Start, and Georgia Pre-K programs.

#### **Entrance Requirements:**

Age: Minimum of 18 years of age

<b>Required Co</b>	<b>Credit Hours</b>	
ECCE 1101	Introduction to Early Childhood Care and Education	3
ECCE 1103	Child Growth & Development	3
ECCE 1105	Health, Safety and Nutrition	3
ECCE 2330	Infant/Toddler Development	3
ECCE 2332	Infant/Toddler Group Care and Curriculum	3

**Total Credit Hours: 15 Minimum Credit Hours for Graduation** 

**Credit Hours** 

#### NAIL TECHNICIAN (NT11) CERTIFICATE

#### **Campus Availability:**

#### • Walker County Campus

**Program Description:** The Nail Technician program is a sequence of courses that prepares students for careers in the field of Nail Technician. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in safety, sanitation, state laws, rules, and regulations, nail diseases and disorders, skin and nail care, and work ethics. The curriculum meets state licensing requirements of the State Board of Cosmetology. Program graduates receive a Nail Technician certificate and are employable as a Nail Technician.

<b>Required Co</b>	Credit Hours				
COSM 1000	Introduction to Cosmetology Theory	4			
COSM 1070	Nail Care and Advanced Techniques	3			
COSM 1180	Nail Care I	5			
COSM 1120	Salon Management	3			
COSM 1190	Nail Care II	5			

**Total Credit Hours: 20 Minimum Credit Hours for Graduation** 

#### SHAMPOO TECHNICIAN (ST11) CERTIFICATE

#### **Campus Availability:**

- Floyd County Campus
- Gordon County Campus
- Polk County Campus
- Walker County Campus

#### Program Description:

The Shampoo Technician Technical Certificate of Credit 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 Cosmetology salesperson, salon manager, or salon owner.

#### **Entrance Dates:**

Fall or spring semester (Floyd/Polk County campuses-Day Program) Winter or summer semester (Polk County campus-Night Program) Fall or winter semester (Walker County campus)

<b>Required Cu</b>	<b>Credit Hours</b>	
COSM 1000	Introduction to Cosmetology Theory	4
COSM 1020	Hair Care and Treatment	2
COSM 1120	Salon Management	3
EMPL 1000	Interpersonal Relations and Professional Development	2
or		
XXXX xxxx	Elective	(3)

#### Total Credit Hours: 11 Minimum Credit Hours for Graduation

Georgia Northwestern Technical College Catalog

# Course Descriptions

**Credit Course Descriptions:** On the following pages students will find descriptions of courses offered by the college. Course descriptions identify course names, short summaries of course contents, and prerequisites that must be taken before other specific courses can be taken. Students must earn grades of "C" or better in prerequisite courses in order to take higher level courses. Course descriptions also identify corequisite courses that must be taken with specific courses, and the number of credit hours students will earn with successful completion of courses.

**Course Number Identification:** Courses numbered 0090-0099 are Learning Support courses and do not carry credit towards graduation. Courses numbered 1000 and above carry credit towards graduation. General education courses carrying a course number of 1000-1099 are diploma courses. Course numbers from 1100-2000 identify degree courses. Occupational courses are numbered 1000-2999. Associate of applied science degree students taking general education courses for associate degree programs must take general education/core courses numbered 1100-2999. ENGL 1101, for example, is an associate degree level course. The College reserves the right to cancel or delete any course section with insufficient enrollment.

#### ACCT 1100 - Financial Accounting I

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

#### ACCT 1105 - Financial Accounting II

Prerequisite: ACCT 1100 and Instructor Approval for Provisional Students. Introduces the intermediate financial accounting concepts that provide the student with the necessary skills to maintain a set of books for a partnership and corporation. Topics include: Fixed and Intangible Assets, Current and Long-Term Liabilities (Notes Payable), Payroll, Accounting for a Partnership, Accounting for a Corporation, Statement of Cash Flows, and Financial Statement Analysis, Laboratory work demonstrates theory presented in class.

#### ACCT 1110 - Managerial Accounting

Prerequisite: ACCT 1105. Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include Managerial Accounting Concepts, Manufacturing Accounting using a Job Order Cost System, Manufacturing Accounting using a Process Cost System, Cost Behavior and Cost-Volume-Profit, Budgeting and Standard Cost Accounting, Flexible Budgets, Standard Costs and Variances, and Capital Investment Analysis and Budgeting. Laboratory work demonstrates theory presented in class.

#### ACCT 1115 - Computerized Accounting

Prerequisites: ACCT 1100, COMP 1000. Emphasizes operation of computerized accounting systems from manual input forms. Topics include: company creation (service and merchandising), chart of accounts, customers transactions, vendors transactions, banking activities, merchandise inventory, employees and payroll, and financial reports. Laboratory work includes theoretical and technical application.

#### ACCT 1120 - Spreadsheet Applications

Prerequisite: COMP 1000. This course covers the knowledge and skills to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and collaborating and securing data.

#### ACCT 1125 - Individual Tax Accounting

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

#### ACCT 1130 - Payroll Accounting

Prerequisite: ACCT 1100. 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.

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#### ACCT 2120 - Business Tax Accounting

# *Prerequisite:* ACCT 1125. 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.

#### ACCT 2140 - Legal Environment of Business

*Prerequisite*: Program admission. 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.

#### **ACCT 2145 - Personal Finance**

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

#### ACRP 1000 - Introduction to Auto Collision Repair

*Prerequisite:* Provisional admission. This course provides instruction in procedures and practices necessary for safe and compliant operation of auto collision repair facilities. It introduces the structural configuration and identification of the structural members of various unibodies and frames used for automobiles as well as equipment and hand tools used in collision repair tasks.

#### ACRP 1005 - Automobile Component Repair and Replacement

## *Prerequisite:* ACRP 1000. This course provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile as well as bolt-on body panels.

#### ACRP 1010 - Foundations of Collision Repair

*Corequisites*: ACRP 1000; ACRP 1005. This course introduces the materials, tools, and operations required to repair minor collision damage and it provides instruction in non-metallic auto body repair techniques.

#### ACRP 1015 - Fundamentals of Automotive Welding

*Prerequisite:* ACRP 1000. This course introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques through a variety of different procedures.

#### ACRP 1018 - Mechanical and Electrical Systems

*Prerequisite*: Program admission. *Corequisite*: ACRP 1000. This course introduces the various mechanical and electrical systems found on vehicles typically requiring repair of damages incurred through automobile collisions.

#### **ACRP 2000 - Introduction to Refinishing**

*Prerequisite*: Provisional admission. *Corequisite*: ACRP 1000; ACRP 1010. This course introduces the hand and pneumatic tools, spray guns, materials and procedures involved in preparing automobile bodies for refinishing. Typical methods and techniques used in detailing a refinished automobile surface are also introduced in this course.

#### ACRP 2005 - Fundamentals of Refinishing I

*Prerequisite*: Program admission. *Corequisite*: ACRP 1000; ACRP 2000. The course introduces the spray gun equipment, materials, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing theories and procedures.

#### ACRP 2008 - Fundamentals of Refinishing II

*Corequisite:* ACRP 2005. This course further expands on the spray gun equipment, materials, and techniques used in the application of special paints to automobile finishes introduced in Fundamentals of Refinishing I. Emphasis will be placed on blending, tinting, and matching colors.

#### **ACRP 2009 - Refinishing Internship**

*Prerequisite*: ACRP 1000. *Corequisite*: ACRP 2005; ACRP 2008. Provides occupation-based learning opportunities for students pursuing the Paint and Refinishing specialization. Students will be mentored by qualified professional technicians as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: sanding, priming, and paint preparation; special refinishing applications; urethane enamels; tint and match colors; and detailing.

#### ACRP 2010 - Major Collision Repair

*Prerequisite*: ACRP 1000. *Corequisite*: ACRP 1005. This course introduces procedures and resources used in the identification and assessment of automotive collision damages. This course provides instruction on the hydraulic systems and for the diagnosis, straightening, measuring and alignment of automobile frames and bodies.

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#### ACRP 2015 - Major Collision Replacements

*Prerequisite*: ACRP 1000. *Corequisite*: ACRP 2010. This course provides instruction in conventional/unibody automobile body structural panel repairs emphasizing a variety of removal and replacement techniques.

#### ACRP 2019 - Major Collision Repair Internship

*Prerequisite*: ACRP 1000. *Corequisite*: ACRP 2010; ACRP 2015. Provides occupation-based learning opportunities for students pursuing the Major Collision Repair specialization. Qualified professional technicians will mentor students as they experience working in the Automotive Collision Repair profession in an industry standard commercial repair facility or industry standard simulated on-campus facility. Topics include: conventional frame repair, unibody damage identification and analysis, unibody measuring and fixturing systems, unibody straightening systems and techniques, unibody welding techniques, unibody structural panel repair and replacement, conventional body structural panel repair, unibody suspension and steering systems, and bolt-on body panel removal and replacement.

#### AIRC 1005 - Refrigeration Fundamentals

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

#### AIRC 1010 - Refrigeration Principles and Practices

*Prerequisite:* AIRC 1005. This course introduces the student to basic refrigeration system principles and practices, and the major component parts of the refrigeration system. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, recycling, and reclamation, evacuation, charging, and safety.

#### AIRC 1020 - Refrigeration Systems Components

*Prerequisite:* AIRC 1005. This course provides the student with the skills and knowledge and skills to install, test, and service major components of a refrigeration system. Topics include compressors, condensers, evaporators, metering devices, service procedures, refrigeration systems and safety.

#### AIRC 1030 - HVACR Electrical Fundamentals

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

#### AIRC 1040 - HVACR Electrical Motors

*Prerequisite:* AIRC 1030. This course provides the student with the skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, installation procedures, types of electric motors, electric motor service, and safety.

#### AIRC 1050 - HVACR Electrical Components and Controls

*Corequisite:* AIRC 1030. Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, transformers, other commonly used controls, diagnostic techniques, installation procedures, solid state controls, and safety.

#### AIRC 1060 - Air Conditioning Systems Application and Installation

*Corequisites:* AIRC 1010; AIRC 1030. Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, split-systems, add-on systems, packaged systems, system wiring, control circuits, and safety.

#### AIRC 1070 - Gas Heat

*Prerequisite:* AIRC 1030. This course introduces principles of combustion and service requirements for gas heating systems. Topics include servicing procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

#### AIRC 1080 - Heat Pumps and Related Systems

*Prerequisites:* AIRC 1010; AIRC 1030. This course provides instruction on the principles, applications, and operation of a residential heat pump system. Topics include installation and servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, valves, and troubleshooting techniques.

#### AIRC 1090 - Troubleshooting Air Conditioning Systems

*Prerequisites:* AIRC 1010; AIRC 1030. This course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, the refrigeration cycle, electrical servicing procedures, and safety.

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#### ALHS 1010 – Introduction to Anatomy and Physiology

Prerequisite: Program admission. Provides a study of medical terminology and the basic study of structure and function of the human body. It provides an overview of the functions of each body system and the medical terminology associated with each system. This course is intended for students in non-medical programs and is designed to provide medical terminology and basic knowledge of anatomy and physiology.

#### ALHS 1011 - Anatomy and Physiology

Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system.

#### **ALHS 1126 - Health Science Physics**

Introduces the student to the basic laws of physics with specific applications for health science students. Topics include basic Newtonian mechanics, fluid mechanics, heat and temperature, medical imaging techniques that utilize electromagnetic radiation and sound, basic principles of waves, light, and sound, basic principles of electricity and magnetism, and electrical safety.

#### ALHS 1030 - Nutrition and Diet Therapy

Prerequisite: ALHS 1011, A study of the nutritional needs of the individual. Topics include: basic nutrients, food sources, the role nutrition plays in the maintenance of health for the individual, and using diet to treat certain pathologic conditions.

#### ALHS 1040 - Introduction to Health Care

Introduces a grouping of fundamental principles, practices, and issues common in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control/blood and air-borne pathogens.

#### ALHS 1054 - Spanish for Allied Health Workers

Prerequisite: Provisional admission. An introduction to the Spanish language and Latino culture as applied to the allied health industry. Topics include: introductory conversational Spanish with an emphasis on allied health industry and on medical terminology vocabulary in the areas of Spanish verbs, nouns and grammar and understanding and appreciating aspects of Latino culture for more effective management. Additional concentration on completing physical assessments in Spanish and questioning of patients as to their health conditions, needs, and concerns.

#### ALHS 1060 - Diet and Nutrition for Allied Health Sciences

Prerequisite: Program admission. A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

#### ALHS 1090 - Medical Terminology for Allied Health Sciences

Introduces the elements of medical terminology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. Topics include: origins (roots, prefixes, and suffixes), word building, abbreviations and symbols, and terminology related to the human anatomy.

#### ALHS 1127 - Health Sciences Chemistry

Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement and units, atomic structure, chemical bonding, physical states of matter, nomenclature, stoichiometry, acids and bases, gases, liquid mixtures, nuclear chemistry, organic chemistry and biochemistry.

#### **AMCA 2110 - CNC Fundamentals**

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Prerequisites: Provisional admission; MCHT 1011; MCHT 1012; MCHT 1013. Provides a comprehensive introduction to computer numerical controlled (CNC) machining processes. Topics include: safety. Computer Numerical Control of machinery, setup and operation of CNC machinery, introduction to programming of CNC machinery, introduction to CAD/CAM.

#### AMCA 2130 - CNC Mill Manual Programming

Corequisite: AMCA 2110. Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculation for programming, program codes and structure, program run and editing of programs.

#### AMCA 2150 - CNC Lathe Manual Programming

Corequisite: AMCA 2110. Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) Lathes. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.

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#### AMCA 2170 - CNC Practical Applications

Prerequisites: AMCA 2110; AMCA 2130; AMCA 2150. Provides additional instruction in part holding and fixture design. Students will also gain additional experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing.

#### AMCA 2190 - CAD/CAM Programming

Corequisite: AMCA 2110. Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading.

#### ARTS 1101 – Art Appreciation

Explores the visual arts and the relationship to human needs and aspirations. Students investigate the value of art, themes in art, the elements and principles of composition, and the materials and processes used for artistic expression. Well-known works of visual art are explored. The course encourages student interest in the visual arts beyond the classroom.

#### AUMF 1150 - Introduction to Robotics

Prerequisite: AUMF 1120. 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.

#### AUMF 2060 - Work Cell Design Laboratory

Allows students 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.

#### AUTT 1010 - Automotive Technology Introduction

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

#### AUTT 1020 - Automotive Electrical Systems

Prerequisite: AUTT 1010. Introduces automotive electricity, emphasizes the basic principles, diagnosis, and service/repair of batteries, starting systems, starting system components, alternators and regulators, lighting system, gauges, horn, wiper/washer, and accessories.

#### AUTT 1030 - Automotive Brake Systems

Prerequisite: AUTT 1010. Introduces brake systems theory and its application to automotive systems and anti-lock brake system (ABS) to include ABS components and ABS operation, testing, and diagnosis. Topics include: hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; miscellaneous brake components (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair; test, diagnose, and service electronic brake control system.

#### AUTT 1040 - Automotive Engine Performance

Prerequisite: AUTT 1020. Introduces basic engine performance systems which support and control four stroke gasoline engine operations and reduce emissions. Topics include: general engine diagnosis, computerized engine controls and diagnosis, ignition system diagnosis and repair, fuel and air induction, exhaust systems, emission control systems diagnosis and repair, and other related engine service.

#### AUTT 1050 - Automotive Suspension and Steering Systems

Prerequisite: AUTT 1010. Introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include: general suspension and steering systems diagnosis; steering systems diagnosis and repair; suspension systems diagnosis and repair; related suspension and steering service; wheel alignment diagnosis, adjustment and repair, wheel and tire diagnosis and repair.

#### AUTT 1060 - Automotive Climate Control Systems

Prerequisite: AUTT 1020. 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.

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#### **AUTT 1070 - Automotive Technology Internship**

Prerequisites: AUTT 1010; AUTT 1020; AUTT 1030. This elective course will provide the student with an opportunity to relate what they have learned in the classroom and lab to a real world situation either at a place of business or at a technical college. Under the supervision of an experienced ASE certified automotive technician or their instructor, the student will obtain a greater admiration and appreciation of the material learned in the classroom and lab. The internship will also serve the function of bridging the lessons learned at school and applying that to real world situations. The suitability of the work setting will be determined by having a conference with the automotive instructor and the prospective employer. The student will have the option to take the internship program at an approved place of employment or at the college if he or she wishes and perform all the live work duties of the service writer, parts department personnel, and technician to include writing the repair order, ordering parts (if applicable) and repairing the vehicle. Student must work a minimum of 150 hours during the semester to receive credit for this course.

#### AUTT 2010 - Automotive Engine Repair

Prerequisite: AUTT 1010. This course introduces the student to automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for both 2 cycle and 4 cycle internal combustion engines. Topics include general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

#### AUTT 2020 - Automotive Manual Drive Train and Axles

Prereauisite: AUTT 1010. This course introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive, drive line related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (CV) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxles operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxles diagnosis and repair.

#### AUTT 2030 - Automotive Automatic Transmissions and Transaxles

Prerequisite: AUTT 1020. Introduces students to basic automatic transmission/transaxle theory, operation, inspection, service, and repair procedures as well as electronic diagnosis and repair. Topics include: general automatic transmission and transaxle diagnosis; in vehicle and off vehicle transmission and transaxle maintenance, adjustment and repair.

#### **AUTT 2100 - Automotive Alternative Fuel Vehicles**

Prerequisite: AUTT 1020. This course will give students the basic knowledge to understand Electric Drive Vehicles, Hybrid Electric Vehicles, and Alternative Fuel Vehicles. The course will cover components, operation, precautions, and diagnostics of BEV, HEV, Fuel Cell Vehicles, and other fuel vehicles. The student will become familiar with the unique hybrid systems and repair procedures on various hybrid vehicles. This course is a program elective which can be used as a substitute for AUTT 1070 (Internship).

#### AVIO 1010 - Basic Electronics

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

#### **AVIO 1020 - Avionics Maintenance Practices**

Corequisite: AVIO 1010. Provides practical experience in maintaining avionics systems. Topics include: solder/solderless connecting, use of test instruments, component installation/removal techniques, repair procedures, and troubleshooting techniques.

#### AVIO 1030 - Advanced Electronics

Prerequisite: AVIO 1010. Introduces the theory and application of radio frequency transmission and reception. Topics include: power supplies, oscillators, amplifiers, transmitters, amplitude modulation, AM receivers, frequency modulation, and antenna systems.

#### **AVIO 1040 - Digital Electronics**

Prerequisite: AVIO 1010. Introduces the theory and application of digital electronics with a primary focus on their use in avionic systems. Topics include: numbering system, logic gates, Boolean algebra, flip-flops, and registers and counters.

#### AVIO 1060 - Aircraft Logic Systems

#### Corequisite: AVIO 1040. Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

#### **AVIO 1070 - Aircraft Communication Systems**

*Corequisite:* AVIO 1040. Continues the study of avionics maintenance practices with emphasis on aircraft communication systems. Topics include: component operation, component location, integration, analysis, maintenance, and ACARS.

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#### **AVIO 1080 - Navigation Systems**

Prerequisite: AVIO 1040. Corequisite: AVIO 1070. Continues the study of avionics maintenance practices with emphasis on aircraft navigational systems. Topics include: bridges and monitors, synchros, gyros, and navigation systems.

#### AVIO 1090 - Flight Director and Autopilot Systems

Corequisite: AVIO 1080. Continues the study of avionics maintenance practices with emphasis on flight director and autopilot systems. Topics include: flight director systems, autopilot systems, and avionics line maintenance test equipment.

#### AVMT 1000 - Aviation Mathematics

Prerequisite: Program admission. Aviation Mathematics provides students with the knowledge necessary to use and apply mathematical procedures and processes that are applicable to aviation maintenance functions. Topics include: perform algebraic operations; extract roots and raise numbers to a given power; determine area and volume of geometrical shapes; and solve ratio, proportion, and percentage problems.

#### AVMT 1010 - Aircraft Maintenance Regulations

Prerequisite: Program admission. This course provides students with the knowledge and skills necessary to select and use FAA and manufacturers' specifications, data sheets, manuals, related regulations, and technical data; to write descriptions of aircraft conditions, record work performed, and complete maintenance forms and inspection reports; and to interpret federal regulations regarding mechanic privileges and limitations. Topics include: maintenance publications, maintenance forms and records, and mechanic privileges and limitations.

#### AVMT 1020 - Aircraft Applied Sciences I

Prerequisite: Program admission. Provides students with the fundamentals of aircraft materials and processes, ground operations and servicing, and aircraft cleaning and corrosion control.

#### AVMT 1025 - Aircraft Applied Sciences II

Prerequisite: Program admission. Provides students with the fundamentals of aircraft drawings, weight and balance, and fluid lines and fittings.

#### AVMT 1030 - Aircraft Electricity and Electronics

Corequisite: AVMT 1000. Basic Electricity and Electronics provides a study of the relationships of voltage, current, and resistance in aircraft electrical systems, and the use of meters. Alternators; generators; starters; motors; charging systems; basic AC and DC systems; and semiconductor, solid state, and integrated circuit fundamentals are introduced. Topics include: basic electricity; determine the relationship of voltage, current, and resistance in electrical circuits; read and interpret electrical circuit diagrams; measure voltage, current, resistance, and continuity; calculate and measure electrical power; calculate and measure capacitance and inductance; inspect and service batteries; and solid state devices applications. (diploma) or MATH 1111 (degree). Basic Electricity and Electronics provides a study of the relationships of voltage, current, and resistance in aircraft electrical systems, and the use of meters. Alternators; generators; starters; motors; charging systems; basic AC and DC systems; and semiconductor, solid state, and integrated circuit fundamentals are introduced. Topics include: basic electricity; determine the relationship of voltage, current, and resistance in electrical circuits; read and interpret electrical circuit diagrams; measure voltage, current, resistance, and continuity; calculate and measure electrical power; calculate and measure capacitance and inductance; inspect and service batteries; and solid state devices applications.

#### AVMT 1210 - Aviation Physics

Corequisite: AVMT 1000. Provides students with an introduction to the theory and application of physics to aerospace vehicles and their subsystems. Topics include: temperature and heat; pressure, temperature, and volume of air mass; basic aerodynamics and theory of flight; physical factors affecting engine output; relationship of pressure, area, and force; origin of sound; principles of simple machines; and centrifugal and centripetal force.

#### AVMT 2010 - Aircraft Airframe Structures

Prerequisite: Program admission. This course presents a survey of aircraft airframe structures used in aircraft. Topics include: wood structures, aircraft covering, and aircraft finishes.

#### AVMT 2020 - Airframe Sheet Metal and Non-Metallic Structures

Prerequisite: Program admission. Provides a study of metal and non-metallic tube and riveted sheet monocoque or semi-monocoque. Topics include: sheet metal structures introduction; install conventional rivets; install special rivets and fasteners; sheet metal form, lay out, and bend; inspect and repair sheet metal structures; identify non-metallic structures; inspect bonded structures; fiberglass structures; plastic structures; composite and honeycomb structures; inspect, check, service, and repair windows, doors, and interior furnishings; and laminated structures.

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#### AVMT 2030 Airframe Welding

#### Prerequisite: Program admission. Provides a study of airframe non-metallic structures and allied maintenance procedures. Topics include: welding principles; soldering, brazing, gas-welding, and arc-welding steel; welding aluminum and stainless steel; fabricating tubular structures; soldering stainless steel; and welding titanium and magnesium.

#### AVMT 2040 - Airframe Assembly and Rigging

Prerequisite: Program admission. This course provides a study of aircraft assembly and rigging configurations. Topics include: use assembly and rigging hand tools and equipment; rig fixed wing aircraft; rig rotary wing aircraft; check alignment of structures; assemble aircraft components, including flight control surfaces; balance, rig, and inspect movable primary and secondary control surfaces; and jack aircraft.

#### **AVMT 2050 - Airframe Inspection**

Prereauisite: AVMT 1010; AVMT 1020; AVMT 1025; AVMT 2010. This course provides instruction for performing airframe inspections with emphasis on developing the skills related to conformity and air worthiness evaluations. Topics include: perform airframe conformity inspection, and perform airframe air worthiness inspection.

## AVMT 2060 - Aircraft Hydraulic and Pneumatic Systems

Prerequisite: Program admission. This course provides a study of the principles of generation, distribution, and management of hydraulic and pneumatic power throughout the aircraft. Topics include: identify hydraulic fluids; repair hydraulic and pneumatic power system components; inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems; hydraulic and pneumatic position and warning systems; and inspect, check, troubleshoot, service, and repair aircraft position and warning systems.

#### AVMT 2070 - Aircraft Landing Gear Systems

Prerequisite: Program admission. This course provides a study of aircraft landing gear systems with emphasis on inspection and maintenance procedures of hydraulic and pneumatic power throughout the aircraft structure. Topics include: inspect, check, service, and repair landing gear retraction systems and shock struts; inspect, check, service, and repair brakes, wheels, and tires; and inspect, check, service, and repair steering systems.

#### **AVMT 2080 - Aircraft Environmental Control Systems**

Prerequisite: Program admission. This course provides a study of aircraft environmental control systems. Topics include: inspect, check, troubleshoot, service, and repair cabin atmosphere control systems; inspect, check, troubleshoot, service, and repair ice and rain control systems; and inspect, check, troubleshoot, service, and repair fire protection systems.

## AVMT 2085 - Aircraft Fuel and Instrument Systems

Prerequisite: Program admission. This course provides a study of airframe fuel and instrument systems. Topics include: inspect, check, troubleshoot, service and repair aircraft fuel systems; and inspect, check, troubleshoot, service and repair aircraft instrument systems.

#### **AVMT 2090 - Aircraft Electrical Systems**

Corequisite: AVMT 1030. This course provides a study of aircraft electrical systems. Topics include: install, check, and service airframe electrical wiring, controls, switches, indicators, and protective devices; inspect, check, troubleshoot, service, and repair alternating and direct current electrical systems; repair and inspect aircraft electrical system components, crimp and splice wiring to manufacturer's specifications, and repair pins and sockets of aircraft connectors; and inspect, check, and troubleshoot constant speed and integrated speed drive generators.

## AVMT 2095 - Aircraft Communication and Navigation Systems

*Corequisite:* AVMT 1030. This course provides a study of aircraft communication and navigation systems. Topics include: inspect, check, and troubleshoot autopilot servos and approach coupling systems; inspect, check, and service aircraft electronic communication and navigation systems including VHF passenger address interphones and static discharge devices, aircraft VOR, ILS LORAN, radar beacon transponders, flight management computers, and GPWS; and inspect and repair antenna and electronic equipment installations.

## AVMT 2210 - Reciprocating Engine Powerplants I

Prerequisite: Program admission. This course provides a study of piston engine theory and maintenance including air and water cooled aircraft engines. Topics include: aircraft reciprocating engine theory, and inspect and repair radial engines.

## **AVMT 2220 - Reciprocating Engine Powerplants II**

*Corequisites:* AVMT 2210. This course continues a study of piston engine theory and maintenance including air and water cooled aircraft engines. Topics include: overhaul a reciprocating engine; inspect, check, service, and repair reciprocating engines and engine installations; and install, troubleshoot, and remove reciprocating engines.

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#### AVMT 2230 - Gas Turbine Powerplants I

Prerequisite: Program admission. This course provides a study of the fundamentals and evolution of the jet engine and jet propulsion. Topics include: aircraft gas turbine engine theory, and inspect and troubleshoot unducted fan systems and components.

#### AVMT 2240 - Gas Turbine Powerplants II

Corequisites: AVMT 2230. This course continues a study of the fundamentals and evolution of the jet engine and jet propulsion. Topics include: overhaul a turbine engine; install, troubleshoot, and remove turbine engines; and inspect, check, service, and repair turbine engines and turbine engine installations.

#### AVMT 2250 - Aircraft Engine Inspection

Prerequisite: AVMT 1010. This course provides students with the knowledge and skills to perform aircraft engine inspections. Topics include: perform an aircraft power plant conformity and air worthiness inspection.

#### AVMT 2260 - Aircraft Engine Fuel and Fuel Metering Systems

Prerequisite: Program admission. This course provides a study of aircraft engine fuel and fuel metering systems. Topics include: repair engine fuel system components; inspect, check, service, troubleshoot, and repair engine fuel systems; troubleshoot and adjust turbine engine fuel metering systems and electronic engine fuel controls; inspect check, service, troubleshoot, and repair reciprocating and turbine engine fuel metering systems; overhaul carburetors; repair engine fuel metering system components; and inspect, check, and service water injection systems.

#### AVMT 2270 - Powerplant Instruments, Fire Protection and Electrical Systems 3

Prerequisite: AVMT 1030. This course provides a study of powerplant instruments, fire protection and electrical systems. Topics include: troubleshoot, service, and repair electrical and mechanical fluid rate-of-flow indicating systems; inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and r.p.m. indicating systems; inspect, check, service, troubleshoot, and repair engine fire detection and extinguishing systems; install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices; and repair engine electrical system components.

#### AVMT 2275 - Powerplant Ignition and Starting Systems

Prerequisite: AVMT 1030. This course provides a study of powerplant ignition and starting systems. Topics include: overhaul magneto and ignition harness; inspect, service, troubleshoot, and repair reciprocating and turbine engine ignition systems and components; inspect, service, troubleshoot, and repair turbine electrical starting systems; and inspect, service, and troubleshoot turbine engine pneumatic starting systems.

#### AVMT 2280 - Aircraft Powerplant Accessory Systems

Prerequisite: AVMT 2210; AVMT 2230. This course provides a study of aircraft powerplant accessory systems. Topics include: inspect and maintain aircraft engine lubrication systems; inspect and maintain aircraft engine induction systems; inspect and maintain aircraft engine cooling systems; and inspect and maintain aircraft engine exhaust systems.

#### AVMT 2285 - Aircraft Propeller Systems

Prerequisite: AVMT 2210. This course provides a study of aircraft propeller systems. Topics include: propeller theory and fundamentals; inspect and maintain propellers; and install, troubleshoot, and remove propellers.

#### **BIOL 1111 - Biology I**

Prerequisite: Program admission. Corequisite: BIOL 1111L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

#### BIOL 1111L - Biology Lab I

Prerequisite: Program admission. Corequisite: BIOL 1111. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

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#### **BIOL 1112 - Biology II**

Prerequisite: BIOL 1111; BIOL 1111L. Corequisite: BIOL 1112L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Provides an introduction to basic evolutionary concepts. Also, the course emphasizes animal and plant diversity, structure and function including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include principles of evolution, classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

#### **BIOL 1112L - Biology Lab II**

Prerequisite: BIOL 1111; BIOL 1111L. Corequisite: BIOL 1112. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include principles of evolution, classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

#### **BIOL 2113 - Anatomy and Physiology I**

Prerequisite: Program admission. Corequisites: BIOL 2113L; ENGL 1101. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

#### **BIOL 2113L - Anatomy and Physiology Lab I**

Prerequisite: Program admission. Corequisite: BIOL 2113. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous sensory systems.

#### **BIOL 2114 - Anatomy and Physiology II**

Prerequisites: BIOL 2113; BIOL 2113L. Corequisite: BIOL 2114L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

#### **BIOL 2114L - Anatomy and Physiology Lab II**

Prerequisites; BIOL 2113; BIOL 2113L, Corequisite; BIOL 2114. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

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#### **BIOL 2117 - Introductory Microbiology**

*Prerequisites:* BIOL 2113; BIOL 2113L. *Corequisite:* BIOL 2117L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms and human disease.

#### **BIOL 2117L - Introductory Microbiology Lab**

*Prerequisites:* BIOL 2113; BIOL 2113L. *Corequisite:* BIOL 2117. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

#### **BUSN 1100 - Introduction to Keyboarding**

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

#### **BUSN 1180 - Computer Graphics and Design**

*Prerequisite:* COMP 1000. Introduces how to: design and transmit electronic communications; create graphics on-line; and insert animation and sound to computer generated charts, graphs, and diagrams.

#### **BUSN 1190 - Digital Technologies in Business**

*Prerequisite:* COMP 1000. Provides an overview of digital technology used for conducting business. Students will learn the application of business activities using various digital platforms.

#### **BUSN 1210 - Electronic Calculators**

Develops skill in the use of electronic calculators to interpret, solve, and record results of various types of problems involving the four arithmetic processes. Topics include: machine parts and features, touch system techniques, and arithmetic applications.

#### **BUSN 1220 - Telephone Training**

Familiarizes the student with the proper use of current telephone technology to include equipment, techniques, and attributes.

#### **BUSN 1230 - Legal Terminology**

*Prerequisite:* Provisional admission. This course introduces the spelling, pronunciation, definition, and usage of basic legal terms. The course broadly covers general law terms as well as specialized legal terminology. Topics include: word origins, word building, abbreviations and symbols, correct spelling, pronunciation, and meanings of terminology related to the court system, contracts, family law, real estate, litigation, wills/ probate, bankruptcy, and other areas of the law.

#### **BUSN 1240 - Office Procedures**

Prerequisite: COMP 1000. Corequisite: BUSN 1440. Emphasizes essential skills required for the business office.

#### **BUSN 1250 - Records Management**

Introduces records management concepts for use in any office environment. Topics include: Basic Records Management Concepts; Alphabetic, Numeric, Subject, and Geographic Filing; and Records Retention, Transfer, and Disposition of Records.

#### **BUSN 1300 - Introduction to Business**

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

#### **BUSN 1310 - Introduction to Business Culture**

*Prerequisite:* Program admission. Provides skills and attitudes necessary to function effectively both professionally and interpersonally in the workplace. Topics include: health and wellness; exercise; stress, time, and money management; work ethics; wardrobe on the job; workplace communications; and business entertainment, travel, and international culture.

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#### **BUSN 1320 - Business Interaction Skills**

This course equips participants with the tools to communicate and interact more effectively in person, in writing and on the telephone with both internal and external customers. Participants also learn how to work in teams to create a collaborative environment for accomplishing goals. This course consist of the following: language of business, communication skills, working with information, business writing, team and collaborative skills, and resolving interpersonal conflict.

#### **BUSN 1330 - Personal Effectiveness**

This course focuses on the skills needed to be effective in the corporate environment. The participants learn the importance of effectively managing time, stress and change as they relate to work behavior and quality of work. Topics include: time management, stress management, interview skills/job development, resume writing, and managing change.

#### **BUSN 1340 - Customer Service Effectiveness**

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

#### **BUSN 1400 - Word Processing Applications**

Prerequisites: COMP 1000; BUSN 1440. This course covers the knowledge and skills required to use word processing software through course demonstrations, laboratory exercises and projects. Minimal document keying will be necessary as students will work with existing documents to learn the functions and features of the word processing application. Topics and assignments will include: word processing concepts, customizing documents, formatting content, working with visual content, organizing content, reviewing documents, sharing and securing content.

#### **BUSN 1410 - Spreadsheet Concepts and Applications**

Prerequisite: COMP 1000. This course covers the knowledge and skills required to use spreadsheet software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: spreadsheet concepts, creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually and, collaborating and securing data.

#### **BUSN 1420 - Database Applications**

Prerequisite: COMP 1000. This course covers the knowledge and skills to required to use database management software through course demonstrations, laboratory exercises and projects. Topics and assignments will include: database concepts, structuring databases, creating and formatting database elements, entering and modifying data, creating and modifying queries, presenting and sharing data and, managing and maintaining databases.

#### **BUSN 1430 - Desktop Publishing and Presentation Applications**

Prerequisites: COMP 1000. This course covers the knowledge and skills required to use desktop publishing (DTP) software and presentation software to create business publications and presentations. Course work will include course demonstrations, laboratory exercises and projects. Topics include: desktop publishing concepts, basic graphic design, publication layout, presentation design, and practical applications.

#### **BUSN 1440 - Document Production**

Prerequisite: The ability to key 25 gross words a minute on 3-minute timings with no more than 3 errors. Corequisite: COMP 1000. Reinforces the touch system of keyboarding placing emphasis on correct techniques with adequate speed and accuracy and producing properly formatted business documents. Topics include: reinforcing correct keyboarding technique, building speed and accuracy, formatting business documents, language arts, proofreading, and work area management.

#### **BUSN 2160 - Electronic Mail Applications**

Prerequisites: Program admission, COMP 1000. This course provides instruction in the fundamentals of communicating with others inside and outside the organization via a personal information management program. Emphasizes the concepts necessary for individuals and workgroups to organize, find, view, and share information via electronic communication channels. Topics include: Internal and External Communication, Message Management, Calendar Management, Navigation, Contact and Task Management, and Security and Privacy.

#### **BUSN 2170 - Web Page Design**

Prerequisites: Program admission; COMP 1000. This course provides instruction in the concepts necessary for individuals to create and manage professional quality web sites. Topics include: Web Site Creation, Web Page Development and Design, Hyper link Creation, Test, and Repair, Integration, Web Site Navigation, and Web Site Management.

#### **BUSN 2180 - Speed and Accuracy Keying**

Prerequisite: BUSN 1100 or the ability to key 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors. Further develops speed and accuracy through analysis of keying and prescribed practice drills. Topics include: building speed and accuracy and straight-copy proofreading.

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### **BUSN 2190 - Business Document Proofreading and Editing**

*Prerequisite:* ENGL 1010 or ENGL 1011; BUSN 1440. Emphasizes proper proofreading and editing for business documents. Topics include: applying proofreading techniques and proofreaders marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting.

### **BUSN 2200 – Office Accounting**

*Prerequisite:* Program admission. Introduces fundamental concepts of the accounting cycle for a sole proprietor service business. Topics include: accounting equation, analyzing business transactions, journalizing and posting transactions, accounts receivable and accounts payable subsidiary ledgers, financial statements, cash control, and payroll concepts.

### **BUSN 2210 - Applied Office Procedures**

*Prerequisites:* BUSN 1240, BUSN 1400, BUSN 1410, BUSN 1440. *Corequisites:* BUSN 2190; ACCT 1100 or BUSN 2200. This course focuses on applying knowledge and skills learned in prior courses taken in the program. Topics include: communications skills, telecommunications skills, records management skills, office equipment/supplies, and integrated programs/applications. Serves as a capstone course.

#### **BUSN 2220 - Legal Administrative Procedures**

*Prerequisite:* BUSN 1230. *Corequisite:* BUSN 1440. Emphasizes essential skills required for the legal office. Topics include: legal terminology, preparation of legal documents and correspondence, ethics, and legal office tasks.

#### **BUSN 2230 - Office Management**

*Prerequisite:* BUSN 1240. Provide students with an overview of management concepts, styles, and skills. Topics include: management styles, leadership traits, ergonomics/workflow, communication channels, business ethics, supervisory techniques, and job performance evaluation techniques.

#### **BUSN 2240 - Business Administrative Assistant Internship I**

*Prerequisite:* Must be in last semester of program. With advisor approval, may take concurrently with last semester courses. Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

#### BUSN 2250 - Business Administrative Assistant Internship II

*Prerequisite:* Must be in last semester of program. With advisor approval, may take concurrently with last semester courses. Provides student work experience in a professional environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

#### **BUSN 2300 – Medical Terminology**

*Prerequisite:* Program admission. Introduces the basic spelling and pronunciation of medical terms, and the use of these terms as they relate to anatomy, treatment, surgery, and drugs. Topics include: word analysis, word elements, spelling, pronunciation, and semantics.

### BUSN 2310 – Anatomy and Terminology for the Medical Admin. Assistant 3

*Prerequisite:* Program admission. Introduces the structure and function of the human body including medical terminology. Topics covered include information which will provide the medical office assistant with the knowledge needed to communicate with office staff, physicians, and patients and to assist in completion of medical reports generated in the medical office. Topics include: body structures, body functions, and medical terminology.

#### **BUSN 2320 - Medical Document Processing/Transcription**

*Prerequisites:* ENGL 1010; BUSN 1440; BUSN 2300 or ALHS 1090; BUSN 2310 or ALHS 1010 or ALHS 1011. 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.

#### BUSN 2330 - Advanced Medical Document Processing/Transcription

*Prerequisite:* BUSN 2320. Continues the development of speed and accuracy in the transcription of medical reports with emphasis on a variety of medical specialization. Topics include: equipment and supplies maintenance and usage, work area management, spelling, definitions, punctuation, processing/transcription speed and accuracy, resource utilization, pronunciation, and medical transcription work ethics.

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#### **BUSN 2340 - Medical Administrative Procedures**

Prereauisites; BUSN 2300 or ALHS 1090; BUSN 2310 or ALHS 1010 or ALHS 1011; BUSN 1440; COMP 1000. Emphasizes essential skills required for the medical office. Introduces the knowledge and skills of procedures for billing purposes. Introduces the basic concept of medical administrative assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical administrative assistant's role as an agent of the physician. Provides the student with knowledge and the essentials of professional behavior. Topics include: introduction to medical administrative assisting, medical law, ethics, patient relations/human relations, physician-patient-assistant relationship, medical office in litigation, medical records management, scheduling appointments, pegboard or computerized accounting, health insurance, transcription of medical documents, and billing/collection.

#### **BUSN 2350 - Computerized Medical Office Skills**

Prerequisites: ALHS 1090 or BUSN 2300; ALHS 1010 or ALHS 1011 or BUSN 2310; BUSN 1440; COMP 1000. This course provides a study of the content, code sets, storage, retrieval, control, flow, retention, maintenance of the medical administrative and electronic health record, and computerized office management. Topics include: electronic health information management, electronic data interchange, coding standards, medical record and office management software, point of entry data entry, electronic coding from medical records, speed data entry in processing medical records, analysis of records to improve patient care, confidentiality, release of information, security of electronic health record, communication, technology, insurance payment, managed care, posting to accounts, appointment schedules, practice management, report generation and HIPAA security.

#### **BUSN 2360 - Acute Care Medical Transcription**

Prerequisites: BUSN 2300 or ALHS 1090; BUSN 2310 or ALHS 1010 or ALHS 1011; BUSN 1440; BUSN 2320; ENGL 1010. Development of a high level of speed and accuracy in the transcription of medical reports in an acute care setting. Topics include: equipment and supplies maintenance and usage, work area management, pronunciation, spelling, definitions, punctuation, typing speed and accuracy, and resource utilization.

### BUSN 2370 - Medical Office Billing/Coding/Insurance

Prerequisites: BUSN 2300 or ALHS 1090; BUSN 2310 or ALHS 1010 or ALHS 1011. Provides an introduction to medical coding skills and applications of international coding standards for billing of health care services. Provides the knowledge and skills to apply coding of diagnostic statements and procedures for billing purposes. Provides an introduction to medical coding as it relates to health insurance. Topics include: International classification of diseases, code book formats; coding techniques; formats of the ICD and CPT manuals; health insurance; billing, reimbursement, and collections; and managed care.

#### **BUSN 2380 - Medical Administrative Assistant Internship I**

Prerequisite: Must be in last semester of program. With advisor approval, may take concurrently with last semester courses. Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

### **BUSN 2390 - Medical Administrative Assistant Internship II**

Prerequisite: Must be in last semester of program. With advisor approval, may take concurrently with last semester courses. Provides student work experience in a medical office environment. Topics include: application of classroom knowledge and skills, work environment functions, and listening/following directions. Students will be under the supervision of the Business Administrative Technology program faculty and/or persons designated to coordinate work experience arrangements.

#### CABT 1080 - Cabinet Design and Lavout

Corequisites: COFC 1030; COFC 1050. Provides instruction in the planning, design, and layout of cabinet units. Emphasis will be placed on adherence to blueprint specifications. Topics include: parts identification, cabinet styles and floor plan arrangements, estimation procedures, layout to specifications, shop working sketches, shop management and CAD.

#### CABT 1110 - Wood Joints and Fastening Methods

Corequisites: COFC 1030; COFC 1050. Introduces the fundamentals of wood joint identification, layout, cutting, and assembly, and the variety of fastening methods used in cabinetmaking. Emphasis will be placed on the safe construction of wood joints used.

#### CABT 1114 - Cabinet Components

Corequisites: COFC 1030; COFC 1050; CABT 1110. Instruction provides application of tool and equipment use techniques to the task of cutting out cabinet components. Topics include: equipment safety, frame member, cutting, shelving cutting, drawer component and door cutting, and material optimizing.

#### CABT 1116 - Cabinet Assembly I

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Prerequisites: CABT 1110; CABT 1114. Provides instruction in the fundamental procedures used for assembly of cabinet bases, wall units, and face frames.

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### CABT 1117 - Cabinet Assembly II

Prerequisite: CABT 1116. This course is a continuation of Cabinet Assembly I and provides instruction in the assembly of door assembly, ends assembly, back assembly, joint assembly, and bracing. Further instruction is also included in the assembly of base cabinets and wall units.

### CABT 1118 - Door, Drawer, and Hardware Installation

Corequisites: CABT 1116; CABT 1117. Introduces procedures for the installation of assembled drawers, doors, and related hardware. Emphasis will be placed on the safe use of hand and power tools. Topics include: tool safety, hardware identification and installation, door installation, and drawer installation.

### CABT 1120 - Laminates and Veneers

Corequisites: CABT 1116; CABT 1117. Introduces procedures for the application of plastic laminates and wood veneers. Topics include: laminate, veneer, and glue identification; cutting and fitting procedures; gluing procedures; trimming and edge banding; special tool use; safety precautions; and counter top cutting.

#### CABT 1122 - Cabinet Finishing and Installation

Corequisites: CABT 1116; CABT 1117. Provides instruction in surface preparation, wood finishing procedures, and transporting and installation of cabinets. Finishing procedures will emphasize the use of spray equipment. Topics include: fire prevention, air pollutant, reduction, abrasives identification, finishing materials identification, surface preparation, surface treatment application, repair and touch up procedures, hazardous material disposal, safe use of ladders and scaffolds, cabinet transporting and installation, cabinet trim procedures, and finishing techniques.

### CARP 1070 - Site Layout, Footings and Foundations

Introduces the concepts and practices of basic site layout, footings, and foundation construction. Students will use layout equipment for on-site laboratory practice. Topics include: zoning restrictions and codes, batter board installation, builder's level, squaring methods, footings, plot plan interpretation, materials estimation, foundation types, foundation forms, edge forms, waterproofing, soil testing and excavation.

#### CARP 1105 - Floor and Wall Framing

This course provides instruction in floor and wall materials and materials estimation, framing production of walls and partitions, and framing production of flooring. Emphasis is placed on practical application of skills. Topics include estimation and computation procedures, rough layouts, and layout and installation procedures.

### CARP 1110 - Ceiling and Roof Framing Covering

This course provides instruction in the theory and practical application of skills required to construct ceiling and roof framings and coverings. Topics include systems and materials identification, layout procedures, installation procedures, cost and materials estimation, and safety precautions.

#### CARP 1112 - Exterior Finishes and Trim

Introduces materials identification, estimation, and installation procedures for exterior finish and trim materials to include window and door units. Emphasis will be placed on competency development through laboratory practice. Topics include: doors and windows, siding types, materials identification, materials estimation, and installation procedures.

#### **CARP 1114 - Interior Finishers I**

This course introduces the procedures and methods for identifying materials, cost estimating, and installation of interior finishes and trim. Topics include materials identification, cost estimating, trim, insulation, doors, gypsum wallboard, and paneling used in finishing jobs.

#### **CARP 1190 - Interior Finishes II**

Introduces finish floor coverings for residential construction projects. Emphasis will be placed on identification, estimation and installation of various types of hard and soft floor coverings. This course introduces design, construction and installation of fireplace trim. The course also introduces locating and installing cabinets and millwork. Topics include: identification of flooring materials, flooring estimation procedures, flooring installation procedures, fireplace trim, cabinets and millwork.

#### CARP 1210 - Cornice and Soffit

Provides instruction in the production and installation of various types and styles of cornice and soffit work used in residential carpentry. Topics include: identification of types and styles, vent systems, materials estimation, installation procedures, and ladder and scaffolding safety.

#### CARP 1260 - Stairs

Provides fundamental instruction in the layout, construction, and installation of various stair types. Topics include: identification of stair types, identification of stair components, riser and tread calculation, stringer lavout, and fabrication and installation procedures.

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#### **CARP 1310 - Doors and Door Hardware**

# Provides instruction in the identification and installation of a variety of doors, frames, and door hardware for commercial construction applications. Topics include: door types, door hardware, thresholds, weatherstripping, and overhead doors.

#### CARP 1320 - Site Development, Concrete Forming, & Rigging & Reinforcing 4

This course provides instruction in the development of construction sites with an emphasis on surveying, materials and processes for concrete forming and usage, and the various methods and materials used in the handling and rigging of steel components.

## **CAVT 1100 - Cardiac Cardiovascular Fundamentals**

*Prerequisite:* Program admission. Provides an overview of cardiovascular invasive diagnosis and therapy. Includes an introduction of the cardiac catheterization lab. Topics include: x-ray therapy, safety, positioning, coronary arteriography, pharmacology, invasive cardiac measurements and calculations, and specialty procedures.

#### **CAVT 1002 - Medical Physics**

*Prerequisite:* Program admission. In this course the student is introduced to theory of medical instrumentation and physics found in the cardiovascular sciences. Performance of laboratory procedure is used to reinforce understanding of biomedical applications of equipment and uses as well as proper technique in safety. Topics include: electrical circuit theory, hospital equipment safety and medical instruments and equipment.

### **CAVT 1020 - Cardiac Catheterization I**

*Corequisites:* CAVT 1021; CAVT 1080. This course includes an intensive study of the role of the Cardiovascular Technology student in the various diagnostic invasive cardiac catheterization procedures such as right and left heart procedures, temporary pacemakers, Swan-Ganz catheters, and coronary angioplasty. This includes identification of angiographic images and data as well as basic interventional techniques. Topics include: introduction to cardiac catheterization, medical legal ethics in the cardiac catheterization lab, angioplastic data, hemodynamic principles, special techniques in cardiac catheterization, and interventional techniques. Additional topics include emergency life support, cardiac pharmacology, and cardiac pathology and advance cardiac life support.

### **CAVT 1021 - Cardiac Catheterization Clinical I**

*Corequisites:* CAVT 1020; CAVT 1080. Clinical prep will provide hands-on experience and will serve as an introduction to the competencies, rotations, and expectations of the student while in the cardiac catheterization lab in a student capacity. Topics include: ethical and legal behavior in the catheterization laboratory, environmental safety in the catheterization laboratory, clinical orientation, monitoring skills, and basic life support. The student will perform and complete various competencies to prepare for the clinical experience in each rotation.

### **CAVT 1030 - Electrophysiology and Cardiac Anatomy**

*Prerequisite:* Program admission. Introduces the concepts essential in the performance and interpretation of 12 lead EKG and heart sounds. As a study of the anatomy, physiology, structural relationships, and the pathophysiology of the human heart and vascular system, the course concentrates on specialized terminology, cardiac and vascular anatomy, and electrophysiology. Topics include: heart anatomy, circulatory system, heart electrical system, physical heart defects, electrocardiograph, preparation for various electrocardiographic examinations, physical principles and pathophysiology of heart sounds, exercise physiology, stress testing, Holter monitoring, cardiac pacemakers, and cardiac rehabilitation programs. Laboratory experiences will be provided.

### CAVT 1080 - Advanced Hemodynamics and Cardiac Physiology

*Prerequisite:* CAVT 1030. The student is introduced to various forms of invasive monitoring. Various forms of invasive access are studied, including right and left heart catheterization, arterial line setups, and appropriate care. Emphasis is placed on the basics of hemodynamic monitoring and interpretation. Also provides an overview of cardiovascular physiology and pathophysiology. Topics include: hemodynamics, aseptic technique, infection control, biochemistry of the cardiac muscle, conduction system, electrocardiogram, pathophysiology of acquired diseases, embryological development, and pathophysiology of congenital diseases.

### CAVT 1090 - Drug Calculations and Administration

*Prerequisite:* MATH 1012. Uses 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.

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### **CAVT 2020 - Cardiac Catheterization 2**

Prerequisites: CAVT 1020; CAVT 1021. Corequisite: CAVT 2030. An intensive study of the role of the CV Technologist in the various invasive Cardiac Catheterization procedures such as: Right and Left heart catheterization, temporary pacemakers, Swan-Ganz, and coronary angioplasty, Topics include: general principles of acid-base and blood gas collection, interpretation and analogies, cardiac surgery and peripheral vascular disease, basic principles of electrophysiology and pacemaker technology, congenital heart disease and corrective surgeries, and basic hemodynamic review. Lab experience will be provided.

### CAVT 2030 - Cardiac Catheterization Clinical 2

Prerequisites: CAVT 1020; CAVT 1021. Corequisite: CAVT 2020. Provides hands-on experience in performing invasive cardiac catheterization procedures while being monitored by a registered preceptor. Topics include: policies and procedures class, ethical and legal behavior in the catheterization laboratory, scrubbing skills, monitoring skills, circulating skills, and advanced cardiac life support (ACLS) certification.

#### CAVT 2040 - Cardiac Catheterization 3

An intensive study of the role of the CV Technologist in the various invasive Cardiac Catheterization specialize procedures such as: vascular interventional radiography, cardiac pacing, electrophysiologic testing, and cardiac computer tomography and computer tomography angiography. Clinical Labs experience will be provided.

#### CAVT 2050 - Cardiac Catheterization Clinical 3

Prerequisites: CAVT 2020; CAVT 2030. Corequisite: CAVT 2040. The course provides a culminating clinical experience which allows students to analyze information and procedural instruction provided throughout the program. Offers an intensive study of the hands-on experience in role of the cardiac catheterization technologist in advanced cardiovascular procedures related to the catheterization lab while being monitored by a registered preceptor with emphasis on continuing to develop skills in scrubbing, monitoring and circulating during diagnostic and interventional procedures. Topics include: professional conduct, infection control, scrubbing skills, monitoring skills and circulation skills.

#### CAVT 2060 - Cardiac Catheterization Clinical 4 (Externship)

Prerequisites: CAVT 2040; CAVT 2050. The course provides a culminating independent clinical experience which allows students to analyze information and procedural instruction provided throughout the program. Offers an intensive study of the hands-on experience in the role of a cardiac catheterization technologist in advanced cardiovascular procedures as it relates to the catheterization lab while being monitored by a registered preceptor with emphasis on independently functioning with very little assistance. Continuing to develop skills towards working as a technologist in scrubbing, monitoring and circulating during diagnostic and interventional procedures. Topics include: professional conduct, infection control, scrubbing skills, monitoring skills, and circulating skills.

### CAVT 2070 - Cardiac Catheterization Registry Review I

Prereauisites: CAVT 1020; CAVT 1021; CAVT 2020; CAVT 2030. Corequisites: CAVT 2040; CAVT 2050. An intensive review to prepare the student for the national examination. Topics include: cardiovascular anatomy and physiology, cardiovascular disease and pathophysiology, hemodynamic data, diagnostic techniques and patient care assessments.

#### CHEM 1151 - Survey of Inorganic Chemistry

Prerequisites: MATH 1101 or MATH 1111. Corequisite: CHEM 1151L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurements and units, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

#### CHEM 1151L - Survey of Inorganic Chemistry Lab

Prerequisites: MATH 1101 or MATH 1111. Corequisite: CHEM 1151. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

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### CHEM 1211 - Chemistry I

Prerequisites: MATH 1101 or MATH 1111, Corequisite: CHEM 1211L, This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Provides an introduction to basic chemical principles and concepts which explain the behavior of matter. Topics include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, and stoichiometry and gas laws.

#### CHEM 1211L - Chemistry Lab I

Prerequisites: MATH 1101 or MATH 1111. Corequisite: CHEM 1211. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

#### CHEM 1212 - Chemistry II

Prereauisites: MATH 1101 or MATH 1111; CHEM 1211; CHEM 1211L. Corequisite: CHEM 1212L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Continues the exploration of basic chemical principles and concepts. Topics include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

#### CHEM 1212L - Chemistry Lab II

Prerequisites: MATH 1101 or MATH 1111; CHEM 1211; CHEM 1211. Corequisite: CHEM 1212. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved simultaneously in both. Selected laboratory exercises paralleling the topics in CHEM 1212. The laboratory exercises for this course include equilibrium theory, kinetics, thermodynamics, solution chemistry, acid-base theory, and nuclear chemistry.

#### CIST 1001 – Computer Concepts

Provides an overview of information systems, computers and technology. Topics include: Information Systems and Technology Terminology, Computer History, Data Representation, Data Storage Concepts, Fundamentals of Information Processing, Fundamentals of Information Security, Information Technology Ethics, Fundamentals of Hardware Operation, Fundamentals of Networking, Fundamentals of the Internet, Fundamentals of Software Design Concepts, Fundamentals of Software, (System and Application), System Development Methodology, Computer Number Systems conversion (Binary and Hexadecimal), Mobile computing.

#### **CIST 1101 - Working with Microsoft Windows**

Working with Microsoft Windows provides students with the interface concepts of Microsoft Windows software and the opportunity to develop basic computer skills. Topics include: getting started with Microsoft Windows, managing programs and files with Microsoft Windows, using Microsoft Windows applications, data transfer with Microsoft Windows, printing with Microsoft Windows, and customizing with Microsoft Windows.

#### **CIST 1102 - Working with Microsoft Windows**

Introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 20 GWAM (gross words a minute).

### **CIST 1122 - Hardware Installation and Maintenance**

Prerequisite: Program admission. This course serves to provide students with the knowledge of the fundamentals of computer technology, networking, and security along with the skills required to identify hardware, peripheral, networking, and security components with an introduction to the fundamentals of installing and maintaining computers. Students will develop the skills to identify the basic functionality of the operating system, perform basic troubleshooting techniques, utilize proper safety procedures, and effectively interact with customers and peers. This course is designed to help prepare students for the CompTIA A+ certification examination.

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#### **CIST 1130 - Operating Systems Concepts**

Provides an overview of modern operating systems and their use in home and small business environments. Activities will utilize the graphical user interface (GUI) and command line environment (CLI This will include operating system fundamentals; installing, configuring, and upgrading operating systems; managing storage, file systems, hardware and system resources; troubleshooting, diagnostics, and maintenance of operating systems; and networking.

#### CIST 1200 - Database Management

Provides an overview of the skills and knowledge of database application systems which are used in business government and industry. Topics include: history, database terminology and concepts, database system logical organization, data manipulation, database design concepts, models, normalization, Entity Relationship diagramming, physical database, networking and databases, and database security.

### CIST 1220 - Structured Ouerv Language (SOL)

Prerequisites: CIST 1001; CIST 1305; COMP 1000. Includes basic database design concepts and solving database retrieval and modification problems using the SQL language. Topics include: database Vocabulary, Relational Database Design, Date retrieval using SQL, Data Modification using SQL, Developing and Using SQL Procedures.

#### CIST 1305 - Program Design and Development

An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the four logic structures, file processing concepts, and arrays.

#### CIST 1401 - Computer Networking Fundamentals

Prerequisite: Program admission. Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security.

#### CIST 1510 - Web Development I

Prerequisite: CIST 1305. Explores the concepts of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), XML, and XHTML following the current standards set by the World Wide Web Consortium (W3C) for developing inter-linking web pages that include graphical elements, hyperlinks, tables, forms, and image maps.

#### CIST 1520 - Scripting Technologies

Prerequisite: CIST 1510. Students learn how to use the features and structure of a client side scripting language, explore the features on server side scripting and develop professional web applications that include special effects, interactive, dynamic, validated, and secure forms.

#### CIST 1530 - Web Graphics I

Prereauisite: Program admission. Students will explore how to use industry standard or open source graphics software programs to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays. The course includes a final project that allows students to develop a Web page/site using the chosen software.

#### CIST 1540 - Web Animation I

Prerequisite: Program admission. In this course, students will use scripting and the latest in industry standard or open source software to cover the creation and manipulation of images and animations. Topics include graphic types, organizational methods, drawing tools, beginning to complex object modeling and an introduction to scripting.

#### **CIST 1601 - Information Security Fundamentals**

This course provides a broad overview of information security. It covers terminology, history, security systems development and implementation. Student will also cover the legal, ethical, and professional issues in information security.

#### CIST 1602 - Security Policies and Procedures

This course provides knowledge and experience to develop and maintain security policies and procedures. Students will explore the legal and ethical issues in information security and the various security layers: physical security, personnel security, operating systems, network, software, communication and database security. Students will develop an Information Security Policy and an Acceptable Use Policy.

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#### **CIST 2120 - Using Application Software**

Prerequisite: COMP 1000. This course provides students with knowledge in the following areas: word processing, spreadsheets and presentation software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. This course is designed to help prepare students for the Microsoft Certification tests in Word, Excel and PowerPoint.

#### CIST 2122 - A+ Preparation

Prerequisite: COMP 1122. This course serves to prepare students to complete the CompTIA A+ certification examination. It will provide students with advanced knowledge of computer technology, networking, and security fundamentals. Students will possess the skills required to identify hardware, peripherals, networking components, and security components. Students will understand basic operating system functionality and troubleshooting methodology while practicing proper safety procedures and effective interaction skills with customers and peers.

#### CIST 2126 - Comprehensive Presentations and E-Mail Techniques

Prerequisite: Program admission. This course provides students with knowledge in PIM (Personal Information Management) and presentation software. Presentation topics include creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content, and collaborating on and delivering presentations. Personal information manager topics include e-mail, calendar, task manager, contact manager, note taking, a journal and web browsing.

### **CIST 2127 - Comprehensive Word Processing Techniques**

This course provides students with knowledge in word processing software. Word processing topics include creating, customizing, and organizing documents by using formatting and visual content that is appropriate for the information presented.

#### CIST 2128 - Comprehensive Spreadsheet Techniques

This course provides students with knowledge in spreadsheet software. Spreadsheet topics include creating and manipulating data, formatting data and content, creating and modifying formulas, presenting data visually, and collaborating on and securing data.

#### CIST 2129 - Comprehensive Database Techniques

This course provides a study of databases beginning with introductory topics and progressing through advanced development techniques. Topics include: advanced database concepts, advanced development techniques, data integration concepts, and troubleshooting and supporting databases.

#### **CIST 2130 - Desktop Support Concepts**

This course is designed to give an overview to Desktop Support Management.

#### CIST 2311 - Visual Basic I

Prerequisite: CIST 1305. Visual Basic I introduces event-driven programming. Common elements of Windows applications will be discussed created and manipulated using Microsoft's Visual Studio development environment. Topics include numeric data types and variables, decision making structures, arrays, validating input with strings and functions, repetition and multiple forms, test files, lists and common dialog controls.

#### CIST 2341 - C# Programming I

Prerequisite: CIST 1305. This course is designed to teach the basic concepts and methods of objectedoriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C# Net fits in the application development landscape. Create an understanding of the C# Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

#### CIST 2351 - PHP Programming I

Prerequisite: CIST 1305; CIST 1510. An introductory PHP programming course that teaches students how to create dynamic websites. Topics include: PHP and basic web programming concepts, installing PHP, embedding PHP in HTML, variables and constants, operators, forms, conditional statements, looping, arrays, and text files.

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#### CIST 2371 - Java Programming I

*Prerequisite:* CIST 1305. This course is designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK. Continue to develop student's programming logic skills. Topics include: JAVA Language History, JAVA Variable Definitions, JAVA Control Structures, JAVA Methods, JAVA Classes, JAVA Objects, and JAVA Graphics.

### **CIST 2381 - Mobile Application Development**

*Prerequisite:* CIST 1305. This course explores mobile guidelines, standards, and techniques. This course includes design and development techniques for multiple mobile devices, platforms, and operating systems. Students will develop mobile applications using state of practice development tools, languages and devices.

#### **CIST 2411 - Microsoft Client**

*Prerequisite:* Program instructor approval. Provides the ability to implement, administrator, and troubleshoot Windows Professional Client as a desktop operating system in any network environment.

#### **CIST 2412 - Microsoft Server Directory Services**

Provides students with knowledge and skills necessary to install, configure, manage, support and administer Microsoft Directory Services.

#### **CIST 2413 - Microsoft Server Infrastructure**

Provides students with knowledge and skills necessary to install, configure, manage, support and administer a Microsoft network infrastructure.

#### CIST 2414 - Microsoft Server Administrator

Provides students with knowledge and skills necessary to install, configure, manage, support and administer a Windows Server. Topics include server deployment, server management, monitor and maintain servers, application and data provisioning, and business continuity and high availability.

#### **CIST 2431 - UNIX/Linux Introduction**

This course introduces the UNIX/Linux operating system skills necessary to perform entry-level user functions. Topics include: history of UNIX/Linux, login and logout, the user environment, user password change, the file system, hierarchy tree, editors, file system commands as they relate to navigating the file system tree, UNIX/Linux manual help pages, using the UNIX/Linux graphical desktop, and command options. In addition, the student must be able to perform directory and file displaying, creation, deletion, redirection, copying, moving, linking files, wildcards, determining present working directory and changing directory locations.

#### CIST 2432 - UNIX/Linux Server

This course covers UNIX/Linux operating system administration skills necessary to perform administrative functions. Topics include: installing UNIX/Linux, configuring and building a custom kernel, adding and removing software packages, managing run levels, managing users and groups, implementing security permissions, introduction to shell programming, managing and fixing the file system, managing memory and swap space, managing and scheduling jobs, managing system logs, understanding the boot process, system configuration files, file backup and restore, file compression, fault tolerance, and printing.

#### CIST 2433 - UNIX/Linux Advanced Server

This course covers UNIX/Linux operating system advanced administration skills necessary to perform advanced administrative functions. Topics include: understanding UNIX/Linux networking, managing network printing, configuring and troubleshooting TCP/IP on UNIX/Linux, configuring DHCP, DNS, a Web server, an FTP server, an E-mail server, and understanding NIS (yp) and NFS. Also, includes the following: understanding advanced security issues such as firewalls and NAT, using network commands, use of graphical system such as X Windows, sharing files and printers, and advanced shell programming.

#### CIST 2434 - UNIX/Linux Scripting

Course covers UNIX/Linux shell programming techniques necessary for UNIX/Linux System Administrators to understand and create shell script programs in a UNIX/Linux environment. Topics include: shell variables, running shell script program, conditional processing, looping structures, arithmetic operators, logical operators such as AND, OR, and NOT, positional parameters and process variables, redirection, piping and standard error, use of backslash, quotes and back quotes.

#### CIST 2441 - Cisco Networking for Home and Small Businesses

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, and file and print sharing.

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### CIST 2442 - Cisco Working at a Small-to-Medium Business or ISP

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context.

#### CIST 2443 - Cisco Routing and Switching

The students will be familiarized with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

### **CIST 2444 - Cisco Designing and Supporting Computer Networks**

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. In addition to the Packet Tracer and lab exercises found in the previous courses, there are many pen-and-paper and role laying exercises that students complete while developing their network upgrade proposals.

### **CIST 2451 - Cisco Network Fundamentals**

Prerequisite: Program admission. This course provides students with classroom and laboratory experience in current and emerging network technology. Topics include basics of communication, converged networks, OSI and TCP/IP network models, Application layer protocols, services, and applications, Transport layer protocols and services, Network layer addressing and routing concepts, IPv4 and IPv6, calculating IPv4 subnets, Data Link layer and the encapsulation process, Physical layer components and data encoding, Ethernet and network protocol analysis, network cabling, and basic network configuration.

#### CIST 2452 - Cisco Routing Protocols and Concepts

Prerequisite: CIST 2451. The goal is to develop an understanding of how a router learns about remote networks and determines the best path to those networks. Topics include basics of routing, static routing, dynamic routing, distance vector routing, distance vector routing protocols, VLSM and CIDR, routing table in-depth, link state routing, and link state routing protocols.

#### **CIST 2453 - CISCO LAN Switching and Wireless**

Prerequisite: CIST 2451. The goal is to develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate wireless devices into a LAN. Topics include LAN design, basic switch concepts and configuration, VLAN concepts and configuration, VTP concepts and configuration, STP concepts and configuration, Inter-VLAN routing, and basic wireless concepts and configuration.

### **CIST 2454 - CISCO Accessing the WAN**

Prerequisite: CIST 2452; CIST 2453. Provides students with classroom and laboratory experience in current and emerging network technology. Topics include: introduction to WANs, WAN protocols, basic network security and ACLs, remote access, IP addressing services, and network troubleshooting.

#### CIST 2510 - Web Technologies

Prerequisite: Program admission. In Web Technologies, students will investigate one or more software packages that help automate Web content creation. Students will explore and utilize various features of software packages such as CSS, multimedia incorporation, scripting technologies, form creation, search functionality, advanced image techniques and database connectivity.

#### CIST 2531 - Web Graphics II

Prerequisite: CIST 1530. Students will further explore how to use and industry standard or open source graphics software program to create Web ready images and Web pages. Topics include advanced image correction techniques and adjustments, typography and interpolation as well as conditional scripting statements and arrays.

### **CIST 2541 - Web Animation II**

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Prerequisite: CIST 1540. In this continuation of Web Animation I, students build on their basic scripting knowledge to incorporate advanced scripting techniques in an animated project. They will also explore how to create realistic graphics using inverse kinematics, how to create and edit advanced tweens and how to incorporate various media types into a Web based animation or movie. The course concludes with the completion of a Web animation project.

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#### **CIST 2550 - Web Development II**

Prerequisites: CIST 1220; CIST 1510; CIST 1520. Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation.

#### CIST 2560 - Web Application Programming I

Prerequisite: CIST 1305. CIST 2560 explores W3C and Microsoft .NET programming standards in order to practice various web programming techniques for creating web forms, providing web navigation, and accessing data that produce dynamic interactive web applications. Students may use Microsoft Visual Basic .NET, Microsoft C# .NET, or another .NET language.

#### CIST 2570 - Open Source Web Application Programming I

Prerequisite: CIST 1305. CIST 2570 explores open source W3C programming standards in order to practice various web programming techniques for creating web forms, providing web navigation, and accessing data that produce dynamic interactive web applications. Students may use Java, Perl, PHP, Python, or other open source web programming languages.

#### CIST 2580 - Interactive and Social Apps Integration

Prerequisites: CIST 1305; CIST 2550. This course explores social and interactive web application technology and it's effect on the business model. Topics include interactive and social web business model, interactive and social business web requirements and successful interactive and social integration.

#### CIST 2601 - Implementing Operating Systems Security

This course will provide knowledge and the practical experience necessary to configure the most common server platforms. Lab exercises will provide students with experience of establishing operating systems security for the network environment.

#### CIST 2602 - Network Security

This course provides knowledge and the practical experience necessary to evaluate, implement and manage secure information transferred over computer networks. Topics include network security, intrusion detection, types of attacks, methods of attacks, security devices, basics of cryptography and organizational security elements

#### CIST 2611 - Implementing Internet / Intranet Firewalls

Students will learn how to plan, design, install and configure firewalls that will allow key services while maintaining security. This will include protecting the Internal IP services, configuring a firewall for remote access and managing a firewall.

#### **CIST 2612 - Computer Forensics**

Prerequisites: CIST 1122; CIST 1601. This course examines the use of computers in the commission of crimes, collection, analysis and production of digital evidence. Students will use computer resources to explore basic computer forensic investigation techniques.

#### CIST 2620 - Computer Security/Corporate Fraud

Provides an orientation that contains a step-by-step approach to the investigation, seizure, and evaluation of computer evidence. Topics include: computer-related evidence, crime scene investigation, evidence evaluation and analysis, passwords and encryption, networks, and investigative computer systems. The second part of this course provides an orientation that focuses on corporate fraud as it relates to computerized accounting systems and its technology, the various types of corporate computer fraud and simple audit techniques that can assist in investigating and detecting fraud. Topics include: history and evolution of fraud, mindset: step one in fraud auditing, corporate fraud in the current environment, corporate fraud investigation in the electronic data processing era, defenses against corporate fraud, theft and embezzlement, and auditing for inventory shortage.

#### CIST 2921 - IT Analysis, Design, and Project Management

Prerequisite: CIST 1305. IT Analysis, Design, and Project Management will provides a review and application of systems life cycle development methodologies and project management. Topics include: Systems planning, systems analysis, systems design, systems implementation, evaluation, and project management.

#### CIST 2950 - Web Systems Project

Prerequisite: Program instructor approval. CIST 2950 is a capstone course providing a realistic experience for students working in a team to develop a complete web systems project.

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#### **CIST 2991 - CIST Internship I** Provides the instructor and student a 3 credit hour opportunity to develop special learning environments.

# internship credit hours, the student can take CIST2992 (4 credit hours) and/or CIST2993 (5 credit hours). **CMTT 2010 - Residential Estimating Review**

This course introduces the complete estimating process from excavation to completed residence. Topics include the sequencing of construction, materials calculation, blueprint interpretation methods of construction, working with subcontractors, and final estimate assembly.

Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. To attain additional

### **CMTT 2020 - Construction Drafting I**

Prerequisite: COMP 1000. This course provides instruction in producing residential floor plans and elevations using computer-aided drafting and design (CAD) software. Topics include system setup and system management, software menus and basic functions, prototype drawings, and two and three dimensional drafting and dimensioning.

#### **CMTT 2050 - Residential Code Review**

Prerequisite: CMTT 2010. This course covers building codes as they apply to typical residential applications. Topics include international residential codes, working with building inspectors, permits and inspections, and site visits.

### CMTT 2130 - Computerized Construction Scheduling

Prerequisite: COMP 1000. This course provides instruction in the use of application software for scheduling construction work. The use of contemporary construction scheduling and management software is emphasized. Topics include software overview, scheduling methods and requirements, and computerized scheduling of a simulated construction job.

### CMTT 2170 - Construction Contracting

Prerequisite: CMTT 2130. This course provides an in depth study of the contractual relationship between the parties involved in building construction contracting. Topics include bonds, insurance, bidding, awarding, and subcontracting types and conditions.

#### COFC 1000 - Safety

This course provides a review of general safety rules and practices giving students information about state and federal regulations including OSHA Hazard Communication Standards and Material Safety Data Sheets (MSDS). Emphasis is placed on electrical, fire, lifting, and ladder and scaffolding practices.

### **COFC 1010 - Introduction to Construction**

This course covers the introduction to the different crafts in the building trades through an overview of the building process. The student is also introduced to the attitudes and life skills required to succeed in the construction industry. Topics include an introduction to the construction trades, workplace expectations, professional ethical standards, proper practices, fundamentals of measurement, working in teams, learning for success, and life skills.

#### COFC 1020 - Professional Tool Use and Safety

This course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool discussed. Topics include layout and measuring tools, cutting tools, sawing tools, drilling and boring tools, finishing and fastening tools, general shop tool use, and job site setup.

### **COFC 1030 - Materials and Fasteners**

This course introduces the fundamental array of building materials used in residential and commercial construction. Topics include fasteners, wood products, concrete, brick and block, plumbing materials, finishing materials, manufactured products and an introduction to construction cost estimation.

#### **COFC 1050 - Construction Print Reading Fundamentals**

This course introduces the reading and interpretation of prints and architectural drawings for all of the construction trades. Topics include types of plans, scales, specifications, conventions, and schedules.

#### **COLL 1001 - College Success**

Prerequisite: Program admission. The College Success Course is designed to provide students with the necessary tools needed to succeed in their chosen occupational/technical program of study. Topics include: career exploration, learning and personality styles, stress management strategies, time management strategies, goal setting techniques, study skills, speaking and listening skills, interpersonal relationships skills.

#### **COMP 1000 - Introduction to Computers**

Introduces the fundamental concepts, terminology, and operations necessary to use computers. Emphasis is placed on basic functions and familiarity with computer use. Topics include an introduction to computer terminology, the Windows environment, Internet and email, word processing software, spreadsheet software, database software, and presentation software.

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### **COSM 1000 - Introduction to Cosmetology Theory**

*Prerequisite:* Program admission. Introduces fundamental both theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state rules, and regulations; state regulatory agency, image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology.

### **COSM 1010 - Chemical Texture Services**

*Prerequisite:* COSM 1000. Provides instruction in the chemistry and chemical reactions of permanent wave solutions and relaxers, application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, permanent wave and chemical relaxer application procedures, hair analysis, scalp analysis, permanent wave procedures (in an acceptable time frame), relaxer application (in an acceptable time frame), and Hazardous Duty Standards Act Compliance.

### COSM 1020 - Hair Care and Treatment

*Prerequisite:* COSM 1000. Introduces the theory, procedures and products used in the care and treatment of the scalp and hair, disease and disorders and their treatments and the fundamental theory and skills required to shampoo, condition, and recondition the hair and scalp.

#### COSM 1030 - Haircutting

*Prerequisite:* COSM 1000. Introduces the theory and skills necessary to apply haircutting techniques, advanced haircutting techniques, proper safety and decontamination precautions, hair design elements, cutting implements, head, hair and body analysis, and client consultation.

### COSM 1040 - Styling

*Prerequisite:* COSM 1000. Introduces the fundamental theory and skills required to create shapings, pin curls, fingerwaves, roller placement, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation, and comb-outs. Laboratory training includes styling training on manikin. Topics include: braiding/intertwining hair, styling principles, pin curls, roller placement, fingerwaves, skip waves, ridge curls, blow dry styling, thermal curling, thermal pressing, thermal waving, artificial hair and augmentation.

#### COSM 1050 - Hair Color

*Prerequisite:* COSM 1000. Introduces the theory and application of temporary, semipermanent, demipermanent-deposit only, and permanent hair coloring, hair lightening, and color removal products and application. Topics include: principles of color theory, hair structure, color, tone, classifications of color, hair lightening, color removal, application procedures, safety precautions, client consultation, product knowledge, haircolor challenges, corrective solutions, and special effects.

#### **COSM 1060 - Fundamentals of Skin Care**

*Prerequisite:* COSM 1000. This course provides a comprehensive study in care of the skin for theory and practical application. Emphasis will be placed on client consultation, safety precautions, skin conditions, product knowledge, basic facials, facial massage, corrective facial treatments, hair removal, and make-up application. Other topics in this course include advanced skin treatments in electrotherapy, light therapy, galvanic current, high frequency, and microdermabrasion.

#### COSM 1070 - Nail Care

*Prerequisite:* COSM 1000. Provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, hand and foot anatomy and Physiology, diseases and disorders, manicure techniques, pedicure techniques, nail product chemistry, safety precautions and practices, and advanced nail techniques (wraps/tips/acrylics).

#### COSM 1080 - Cosmetology Practicum I

*Prerequisites/Corequisite:* COSM 1000, COSM 1010, COSM 1020, COSM 1030, COSM 1040, COSM 1050, COSM 1070. Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is required by the Georgia State Board of Cosmetology. This course includes a portion of the required hours for licensure. Topics include: permanent waving and relaxers; various hair color techniques, foiling and lightening; skin, scalp, and hair treatments; haircutting; styling; manicure/pedicure/advanced nail techniques; dispensary; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

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#### **COSM 1090 - Cosmetology Practicum II**

*Prerequisite/Corequisite:* COSM 1080, COSM 1100. Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color, foiling, lightening, skin, scalp, and hair treatments; haircutting; clipper design, precision cutting, styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; product knowledge, customer service skills, client retention, State Board Rules and Regulations guidelines, and State Board foundation prep.

#### COSM 1100 - Cosmetology Practicum III

*Prerequisites:* COSM 1090. Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: texture services; permanent waving and relaxers; haircolor and lightening; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/ pedicure/advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance.

#### COSM 1110 - Cosmetology Practicum IV

*Prerequisite:* COSM 1100. Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; dispensary; styling; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; and state licensure preparation.

#### **COSM 1120 - Salon Management**

*Prerequisite:* COSM 1000. Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: law requirements regarding employment, tax payer education / federal and state responsibilities, law requirements for owning and operating a salon business, business management practices, and public relations and career development.

#### COSM 1180 - Nail Care I

*Prerequisites:* COSM 1000; COSM 1070. *Corequisites:* COSM 1090. Provides additional experience in Manicuring and Pedicuring techniques required of applicants for state licensure. Emphasis is placed on performance, using live models in an actual or simulated occupational setting. Topics include: manicure, nail repair, artificial nails, pedicure, nail art, reception, dispensary, advanced/new techniques, documentation, customer service skills, safety precautions, federal/state agency compliance, and state board foundation prep.

#### COSM 1190 - Nail Care II

*Prerequisites:* COSM 1000; COSM 1070; COSM 1180. Provides nail care experience on live models. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications required by the state board of cosmetology in theory and service credit requirements for this course. Emphasis is placed on performance, using live models in an actual or simulated occupational setting. Topics include: manicure, nail repair, artificial nails, pedicure, nail art, electric drill, reception, dispensary, advanced/new techniques, documentation, customer service skills, safety precautions, federal/state agency compliance, and state board comprehension.

#### **CRJU 1010 - Introduction to Criminal Justice**

*Prerequisite:* Provisional admission. Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements.

#### **CRJU 1021 - Private Security**

*Prerequisite:* Program admission. Provides an orientation to the development, philosophy, responsibility, and function of the private security industry. A historical and philosophical perspective of private security will help students better understand the present stage of private security, its principles, its legal authority and its effect on society in general. Topics include: private security: an overview; basic security goals and responsibilities; when prevention fails; and security systems at work: putting it all together

#### **CRJU 1030 - Corrections**

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*Prerequisite:* Program admission. Provides an analysis of all phases of the American correctional system and practices, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole, and prerelease programs; alternative sentencing; rehabilitation; community involvement; and staffing.

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### **CRJU 1040 - Principles of Law Enforcement**

*Prerequisite:* Program admission. This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

#### CRJU 1043 - Probation and Parole

*Prerequisite:* Program admission. This course will cover the history of both juvenile and adult probation as well as the history of parole. The probation and parole systems will be covered generally with a special emphasis on the Georgia systems and related laws. Topics include: history and philosophy of probation and parole; function of the probation and parole systems; Georgia law related to probation and parole; characteristics and roles of probation and parole officers; and special issues and programs of probation and parole.

#### **CRJU 1050 - Police Patrol Operations**

*Prerequisite:* Program admission. This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills.

#### **CRJU 1052 – Criminal Justice Administration**

*Prerequisite:* Program admission. This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming inter-departmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

#### **CRJU 1054 – Police Officer Survival**

This course examines the critical issues involved in the survival of a police officer in all aspects including their physical, mental, and psychological wellbeing. Emphasis is placed on personal protection skills, defensive tactics, handcuffing techniques, patrol tactics, vehicle stops, building searches and use of force.

#### CRJU 1056 - Police Traffic Control and Investigation

*Prerequisite:* Program admission. This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation.

#### CRJU 1062 – Methods of Criminal Investigation

*Prerequisite:* Program admission. This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes.

#### **CRJU 1063 - Crime Scene Processing**

*Prerequisite:* Program admission. This course presents students with practical exercises dealing with investigating crime scenes and gathering various forms of physical evidence. Emphasis is placed on crime scene assessment, search, fingerprinting, and evidence collection. Topics include: crime scene management, evidence characteristics, identification, documentation and collection as well as techniques for developing and lifting latent fingerprints.

#### **CRJU 1065 - Community-Oriented Policing**

*Prerequisite:* Program admission. Presents the fundamentals for the community-oriented policing philosophy, including the comparison of traditional and community policing philosophies; law enforcement and community relationships; importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors and line personnel; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups; and police problem-solving methodologies. Topics include: foundations of community-oriented policing, partnerships and problem-solving in community-oriented policing, and community-oriented policing projects and programs.

#### **CRJU 1068-** Criminal Law for Criminal Justice

*Prerequisite:* Program admission. This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16 - Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 16 - Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law.

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#### **CRJU 1072 - Introduction to Forensic Science**

*Prerequisite:* Program admission. The origin, history and role of forensic science in the investigative process. Philosophical, rational and practical framework that supports a case investigation will be outlined. The unifying principles of forensic science, the rooting of forensic science in the pure sciences, and the unique ways in which a forensic scientist must think will also be discussed. The special areas of forensic science will be explored.

#### **CRJU 1074 - Applications in Introductory Forensics**

This course complements CRJU 1072: Introduction to Forensics, focusing particularly on the practical application of forensic science in law enforcement including the following: crime scene investigation; interview and interrogation techniques; as well as case preparation and courtroom testimony.

#### **CRJU 1075 - Report Writing**

*Prerequisite:* Program admission. Explains and demonstrates the effectiveness of the entire criminal investigation process by the quality of notes, reports, and accurate documentation. An examination of what goes into the preparation, content, elements, mechanics, and format of documenting the criminal investigation process. Topics include: Field notes, initial information, observations, evidence, victims, witnesses, property, neighborhood canvass, crime scene, laboratory analysis and results, investigative follow-up, suspect statements, and the characteristics essential to quality report writing.

#### CRJU 1400 - Ethics and Cultural Perspectives for Criminal Justice

*Prerequisite:* Program admission. This course provides an exploration of ethics and cultural perspectives in criminal justice. In presenting ethics, both the individual perspective and the organizational standpoint will be examined. Four areas of ethical decision making opportunities are studied including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics. The presentation of cultural perspectives is designed to aid law enforcement officers to better understand and communicate with members of other cultures with whom they come in contact in the line of duty. Topics include: defining and applying terms related to intercultural attitudes, role-play activities related to intercultural understanding, developing interpersonal/intercultural communication competence, and development of personal intercultural growth plan.

#### **CRJU 2020 - Constitutional Law for Criminal Justice**

*Prerequisite:* Program admission. This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment.

#### **CRJU 2050 - Criminal Procedure**

*Prerequisite:* Program admission. Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest and search and seizure; procedures governing arrest, trial, and administration of criminal sanctions; rules of evidence; general court procedures; rights and duties of officers and citizens; and Supreme Court rulings that apply to Law Enforcement/Overview of Constitutional Law.

#### **CRJU 2060 - Criminology**

*Prerequisite:* Program admission. Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: sociological, psychological, and biological causes of crime; effectiveness of theories in explaining crime; theory integration; and application of theory to selected issues.

#### **CRJU 2070 - Juvenile Justice**

*Prerequisite:* Program admission. 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.

#### **CRJU 2090 - Criminal Justice Practicum**

*Prerequisite:* Program admission. Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue a professional research project supervised by the instructor. Topics include: criminal justice theory applications.

#### **CRJU 2100 – Criminal Justice Externship**

Provides experiences necessary for further professional development and exposure to related agencies in the criminal justice field. The student will pursue an externship in a related agency supervised by the instructor. Topics include: criminal justice theory applications.

#### **CRJU 2110 - Homeland Security**

*Prerequisite:* Program admission. The course provides an introduction to the principles of homeland security, roles and responsibilities of constituencies and implications for criminal justice fields. Topics include: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic threats, and emergency preparedness and response.

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### CRJU 2201 - Criminal Courts

*Prerequisite:* Program admission. This course examines the historical context on the development, functions, and controversies in the court system. Topics include: introduction to the courts; participants of a trial; courtroom processes; and the post conviction process.

### CSSP 1010 - Central Sterile Processing Technician

*Prerequisite:* Program admission. This course provides an overview of the Central Sterile Processing and Distribution profession and develops the fundamental concepts and principles necessary to successfully participate as an entry level Central Sterile Processing Technician. Emphasis will be placed on the profession of Central Sterile Processing, basic sciences and related subjects, infection control, aseptic technique, equipment management, sterilization, instrumentation and supplies, legal issues, inventory management, safety, quality assurance, professional development and healthcare trends. Students completing this course will be eligible to apply to take the International Association of Healthcare Central Service Materiel Management (IAHCSMM) certification exam.

### CSSP 1020 - Central Sterile Supply Processing Technician Practicum

*Prerequisites:* Program admission. This course complements CSSP 1010 Central Sterile Supply Processing Technician, providing the practical hours necessary to meet the International Association of Healthcare Central Service Materiel Management (IAHCSMM) requirements to sit for the certification examination.

#### **CTDL 1010 - Fundamentals of Commercial Driving**

Fundamentals of Commercial Driving introduces students to the transportation industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

#### CTDL 1020 - Combination Vehicle Basic Operation and Range Work

*Corequisite:* CTDL 1010. This course familiarizes students with truck instruments and controls and performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must receive 12 hours behind the wheel (BTW) instructional time in range operations such as operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking and coupling/uncoupling.

#### **CTDL 1030 - Combination Vehicle Advanced Operations**

*Corequisite:* CTDL 1020. Advanced Operations develops students' driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. These safe operating practices are integrated into the development of driving skills on the road. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition the student must have a minimum program total of forty four (44) hours BTW instructional time in any combination (with CTDL 1020) of range and street/road driving. Note: state law requires that whenever a combination vehicle is operated on public roads an instructor must be present in the vehicle while the student is driving.

#### **CTDL 1040 - Commercial Driving Internship**

*Corequisite:* CTDL 1020. Commercial Driving Internship provides the opportunity for an individual to complete his/her training with a company. The internship takes the place of CTDL-1030, Advanced Operations. Working closely with the school a company provides the advanced training which focuses on developing students' driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition the student must have a minimum program total of forty-four (44) hours BTW instructional time in any combination (with CTDL 1020) or range and street/road driving. Note: State law requires that whenever a vehicle is operated on public roads an instructor must be present in the truck while the student is driving.

### **CUUL 1000 - Fundamentals of Culinary Arts**

*Prerequisite:* Program admission. Provides an overview of the professionalism in culinary arts, culinary career opportunities, Chef history, pride, and esprit de corps. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, culinary work ethics, quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work.

#### **CUUL 1110 - Culinary Safety and Sanitation**

*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.

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#### CUUL 1120 - Principles of Cooking

*Prerequisite:* Provisional admission. This course introduces fundamental food preparation terms, concepts, and methods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: weights and measures, conversions, basic cooking principles, methods of food preparation, recipe utilization, and nutrition. Laboratory demonstrations and student experimentation parallel class work.

### **CUUL 1129 - Fundamentals of Restaurant Operations**

*Prerequisite:* Provisional admission. Introduces the fundamentals of dining and beverage service and experience in preparation of a wide variety of quantity foods. Course content reflect American Culinary Federation Education Institute apprenticeship training objectives. Topics include: dining service/guest service, dining service positions and functions, international dining services, restaurant business laws, preparation and setup, table side service, and beverage service and setup, kitchen operational procedures, equipment use, banquet planning, recipe conversion, food decorating, safety and sanitation, and production of quantity food. Laboratory practice parallels class work.

#### CUUL 1220 - Baking Principles

Baking Principles presents the fundamental terms, concepts, and methods involved in preparation of yeast and quick breads and 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; Science and use of baking ingredients for breads, desserts, cakes, pastries; weights, measures, and conversions; preparation of baked goods, baking sanitation and hygiene, baking supplies and equipment. Laboratory demonstrations and student experimentation parallel class work.

#### CUUL 1320 - Garde Manger

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; garnishes, carving, and decorating; buffet presentation; cold preparations; hot/cold sandwiches; salads, dressings and relishes; breakfast preparation; hot/cold hors d'oeuvres; chaudfroids, gelees, and molds; and pats and terrines. Laboratory practice parallels class work.

#### CUUL 1370 - Culinary Nutrition and Menu Development

*Prerequisites:* CUUL 1000, CUUL 1120. This course emphasizes menu planning for all types of facilities, services, and special diets. Topics include: menu selection, menu development and pricing, nutrition, special diets, cooking nutritional foods, and organics. Laboratory demonstrations and student management and supervision parallel class work.

#### **CUUL 2130 - Culinary Practicum and Leadership**

*Prerequisite:* Provisional Admission. This course familiarizes the student with the principles and methods of sound leadership and decision making in the hospitality industry and 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 semester. 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. 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.

#### **CUUL 2140 - Advanced Baking and International Cuisine**

This course 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, advanced fry cookery and nutrition. Laboratory practice parallels class work. \*\*\*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.

#### **CUUL 2160 - Contemporary Cuisine**

This course 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, competition entry, nutrition, menu selection, layout and design, and on/ off premise catering. Laboratory demonstration and student experimentation parallel class work.

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#### DENA 1010 - Basic Human Biology

Prerequisite: Program admission. Focuses on basic normal structure and function of the human body with an emphasis on organ systems. Topics include: medical terminology as it relates to the normal human body; and normal structure and function of the human body - cells and tissues, organs and systems, and homeostatic mechanisms.

#### **DENA 1030 - Preventive Dentistry**

Prerequisites/Corequisites: DENA 1080, DENA 1340. Provides students with theory and clinical experience in the area of preventive and public health dentistry. Topics include: etiology of dental disease; patient education techniques; plaque control techniques; types and use of fluoride; diet analysis for caries control; and dietary considerations for the dental patient.

### **DENA 1050 - Microbiology and Infection Control**

Prerequisite: Program admission. Introduces fundamental microbiology and infection control techniques. Topics include: classification, structure, and behavior of pathogenic microbes; mode of disease transmission; body defense and immunity; infectious diseases; and infection control procedures in accordance with CDC recommendations and OSHA guidelines.

#### **DENA 1070 - Oral Pathology and Therapeutics**

Prerequisites: DEN 1010: DEN 1080. Focuses on the diseases affecting the oral cavity and pharmacology as it relates to dentistry. Topics include: identification and disease process; signs/symptoms of oral diseases and systemic diseases with oral manifestations; developmental abnormalities of oral tissues; basic principle of pharmacology; drugs prescribed by the dental profession; drugs that may contraindicate treatment; and applied pharmacology (regulations, dosage, and applications.

#### **DENA 1080 - Dental Biology**

Prerequisite: Program admission. Focuses on normal head and neck anatomy and the development and functions of oral anatomy. Topics include: dental anatomy; oral histology; oral embryology; osteology of the skull; muscles of mastication and facial expression; temporal mandibular joint; blood lymphatic nerve supply of the head; and salivary glands and related structures.

#### **DENA 1090 - Dental Assisting National Board Examination Preparation** 2

Prerequisite: Program instructor approval. Reviews information concerning all didactic areas tested by the Dental Assisting National Board (DANB). Topics include: collecting and recording clinical data; dental radiography; chairside dental procedures; prevention of disease transmission; patient education and oral health management; office management procedures; and test taking skills.

#### **DENA 1340 - Dental Assisting I: General Chairside**

Prerequisites: Program admission; Prerequisites/Corequisites: DENA 1050, DENA 1080. Introduces student to ethics and jurisprudence for the dental assistant and to chairside assisting with diagnostic and operative procedures. Topics include: ethics and jurisprudence in the dental office; four-handed dentistry techniques; clinical data collection techniques; introduction to operative dentistry; and dental material basics.

#### **DENA 1350 - Dental Assisting II: Dental Specialities and EFDA Skills**

Prerequisite: DENA 1340. Focuses on chairside assisting with dental specialty procedures. Topics include: prosthodontic procedures (fixed and removable); orthodontics; pediatric dentistry; periodontic procedures; oral and maxillofacial surgery procedures; endodontics procedures; management of dental office emergencies; medically compromised patients and expanded functions approved by law for performance by dental assistants in the state of Georgia. Student will pass a comprehensive examination and successfully perform all required clinical skills to receive EFDA certification.

#### **DENA 1390 - Dental Radiology**

Prerequisite: DENA 1080. After completion of the course the student will be able to provide radiation safety for patient and self, expose x-rays, process x-rays, and prepare dental films for the dental office. Topics include: fundamentals of radiology and radiation safety; radiographic anatomy and interpretation; intraoral and extraoral radiographic techniques; and guality assurance techniques.

#### **DENA 1400 - Dental Practice Management**

Prerequisite: DENA 1340. Emphasizes procedures for office management in dental practices. Topics include: oral and written communication; records management; appointment control; dental insurance form preparation; accounting procedures; supply and inventory control; employability skills and basic computer skills. A computer lab provides basic skills in computer use and utilization of these skills to perform office procedures on a microcomputer.

#### **DENA 1460 - Dental Practicum I**

Prerequisites: DENA 1050; DENA 1340; DENA 1350; DENA 1390. Practicum focuses on infection control in the dental office and assisting with diagnostic and simple operative procedures. Topics include: infection control procedures: clinical diagnostic procedures: and general dentistry procedures.

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### **DENA 1470 – Dental Practicum II**

#### Prerequisite/Corequisite: DENA 1460. Practicum focuses on advanced general dentistry procedures and chairside in dental specialties with special emphasis on nonsurgical specialties. Topics include: advanced general dentistry and specialties.

#### **DENA 1480 – Dental Practicum III** Prerequisite/Corequisite: DENA 1460, DENA 1470. Practicum continues to focus on assisting chairside with

# DFTG 1015 - Practical Geometry and Trig for Drafting Technology

Prerequisite: MATH 1013. This course introduces and develops basic geometric and trigonometric concepts. Course content will emphasize geometric concepts and trigonometric concepts as they pertain to drafting/CAD.

expanded functions. Topics include: advanced general dentistry procedures; preventive dentistry; dental office management; expanded functions; chairside in specialties; and management of dental office emergencies.

#### DFTG 1101 - CAD Fundamentals

Prerequisite: Provisional Admission, Corequisite: COMP 1000, Establishes safety practices as they relate to a drafting environment. Introduces basic CAD functions while presenting essential principles and practices for line relationships, scale, and geometric construction.

#### DFTG 1103 - Technical Drawing I

Prerequisite: DFTG 1101. Technical Drawing I provides multiview and pictorial sketching, orthographic drawing and fundamental dimensioning methods necessary to develop 2D and 3D views that completely describe machine parts for manufacture using intermediate CAD software techniques.

#### DFTG 1105 - 3D Mechanical Modeling

Prerequisite: DFTG 1103. In the 3D Mechanical Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for mechanical drafting. The student will develop the skills necessary to create 3D models and presentation/working drawings.

#### DFTG 1107 - Technical Drawing II

Prerequisite: DFTG 1103. Corequisite: DFTG 1105. Technical Drawing II continues dimensioning skill development and introduces tools for precision measurement and sectional views.

#### DFTG 1109 - Technical Drawing III

Introduces techniques necessary for auxiliary view drawings, surface development, and developing sheet metal parts. Topics include: primary auxiliary views, secondary auxiliary views, surface development, and developing sheet metal parts.

#### DFTG 1111 - Technical Drawing IV

Prerequisite: DFTG 1103. This course covers the basics of identifying fastening techniques, interpreting technical data, and create working drawings. Topics include utilization of technical data, identifying thread types, graphic representation of threaded fasteners, utilization of other fastening techniques, welding symbol identification, and welding symbol usage in working drawings.

#### DFTG 1113 - Technical Drawing V

Prerequisite: DFTG 1111. Technical Drawing V provides knowledge and skills necessary to create working drawings for the manufacture of machine parts. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

#### **DFTG 1125 - Architectural Fundamentals**

#### Introduces architectural fundamental principles and practices associated with architectural styles and drawing. Fundamentals residential and commercial practices will be covered. Topics include: specifications and materials; architectural styles, construction drawing practices and procedures, dimensioning and scales.

#### DFTG 1127 - Architectural 3D Modeling

In the Architectural 3D Modeling course, the student becomes acquainted with concepts of the software related to Parametric modeling for Architectural drafting. The student will develop the skills necessary to create 3D models and presentation/constructions drawings.

#### DFTG 1129 - Residential Drawing I

Prerequisite: DFTG 1125. Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products also students will be introduce to architectural drawing skills necessary to produce a basic set of construction drawings given floor plan information. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

#### DFTG 1131 - Residential Drawing II

*Prerequisite:* DFTG 1129. Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: material take-offs; footing and foundation; floor plans; exterior elevations; site plans; and construction drawing techniques/practices.

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#### DFTG 1133 - Commercial Drawing I

*Prerequisite:* DFTG 1125. Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, and commercial construction drawings.

#### **DFTG 2010 - Engineering Graphics**

Covers the basics of computer terminology, input and output devices, file formatting, file management, for CAD software. Introduces students to the fundamentals of geometric construction, scale reading line relationship and basic history of the drafting concepts. Student will also be introduced to basic and intermediate CAD commands and procedures, and drafting concepts and principals.

#### **DFTG 2020 - Visualization and Graphics**

This course is an introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting solid modeling including parametric modeling are practiced. Development of working drawings and requirements for drawing in a manufacturing and rapid pro-type environment are emphasized.

### DFTG 2030 - Advanced 3D Modeling Architectural

*Prerequisite:* DFTG 1127. In this course students become acquainted with concepts of the software related to Presentations for Architectural Renderings and Architectural Animations. Students will demonstrate skills in texture applications, camera angles for presentations, lighting and shadow techniques for architectural renderings, and animation techniques for architectural presentations.

#### DFTG 2040 - Advanced 3D Modeling Mechanical

*Prerequisite:* DFTG 1105. In this course the student becomes acquainted with concepts of the software related to Sheet Metal modeling for mechanical drafting, multi-body parts assemblies, and basic animation techniques for mechanical assembly presentations.

#### DFTG 2110 - Blueprint Reading for Technical Drawing I

*Prerequisite:* Provisional admission. Introduces the fundamental principles and practices associated with interpreting technical drawings. Topics include: interpretation of blueprints and sketching.

#### **DFTG 2120 - Print Reading for Architecture**

This course emphasizes skills in reading, producing and interpreting construction drawings. Topics include reading and measuring plans, identifying and understanding lines, symbols, dimensions, materials, schedules, and specifications.

#### **DFTG 2130 - Manual Drafting Fundamentals**

This course emphasizes the essential techniques of basic manual drafting. It introduces drafting tools and equipment, scale and measurement, line relationships and lettering, and geometric construction concepts.

### DFTG 2210 - Blueprint Reading for Technical Drawing II

*Prerequisite:* DFTG 2110. This course continues the development of blueprint reading as applied to technical drawing. Topics include threads (inch and metric), auxiliary views, geometric tolerancing, and weldments.

#### DFTG 2300 - Drafting Technology Practicum/Internship 3

Provides an approved industry-like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

#### DFTG 2400 - Drafting Technology Practicum/Internship 4

Provides an approved industry-like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

#### DFTG 2500 - Drafting Technology Exit Review

Emphasis is placed on students' production of portfolio-quality pieces. Focuses on the preparation for entry into the job market.

#### DFTG 2600 - Drafting Technology Practicum/Internship 6

Provides an approved industry-like setting where the student develops and sharpens skills. Emphasis is placed on production standards achievement and quality control.

#### **DMSO 1010 - Foundations of Sonography**

*Prerequisite:* Program admission. Using classroom didactic instruction and laboratory experiences, this foundations course prepares students for the role of a sonographer. The course provides a base of knowledge and experiences from which complementary and subsequent courses build on. Topics include diagnostic medical sonography history; medical ethics and law; patient privacy and confidentiality; body mechanics, lifts and transfers; patient assessment and administration of care;transducer care; response to medical emergencies; professionalism; medical and sonographic terminology; cultural competence; ergonomics: work related musculoskeletal disorders; basic sonographic physical principles and system operation; Maslows Hierarchy of Needs, and sonographic scanning techniques.

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### DMSO 1020 - Sectional Anatomy and Normal Sonographic Appearance 5

*Prerequisite:* Program admission. This course combines the didactic education of sectional anatomy with active student participation in classroom laboratory experience. Information is weighted toward normal structures which are sonographically visible. Structures are described according to relative location and proportionality. Topics include: normal sectional anatomy of the neck, liver, biliary system, pancreas, genitourinary tract, spleen, peritoneal cavity, retroperitoneum, gastrointestinal tract, and vascular system structures within the upper and lower extremity; anatomic planes related to sonographic images; sonographic appearance and sonographic patterns of structures in the female and male pelvis, neck, liver, biliary system, pancreas, peritoneum and retroperitoneum, gastrointestinal tract, non cardiac chest, and upper and low extremities; and related imaging, laboratory testing procedures and functional testing procedures.

#### DMSO 1030 - Introduction to DMSO Clinical

*Prerequisite:* Program admission. *Prerequisite/Corequisite:* DMSO 1010; DMSO 1020. This course introduces the basic principles and application of the physical assessment as well as the protocols utilized for sonographic procedures. Provides students with an introduction to the clinical setting. Students may be given the opportunity to acquire sonographic images with direct supervision. Topics include: communication including common terminology and abbreviations; patient care; equipment manipulation; ergonomics; sonog raphic imaging; correlation of ultrasound examinations with other imaging modalities and laboratory findings ; and medical law and ethics.

#### **DMSO 1040 - Sonographic Physics and Instrumentation**

*Prerequisite:* Program admission. Sonographers apply principles of ultrasound in the operation of medical sonographic equipment to produce a sonogram. Knowledge of the interaction of ultrasound with tissue is important for image optimization, acquisition and interpretation of sonographic images, and critical to the accurate diagnosis of disease. Introduces concepts for the factors involved with diagnostic ultrasound principles and instruments. Emphasis will be placed on ultrasound physics, transducer construction, operation and characteristics, artifacts and adjustable physics parameters. Topics include: basic principles and wave analysis; propagation of acoustic waves through tissues; principles of pulse echo imaging; sonographic transducers and sound beams; hemodynamic and Doppler imaging; sonographic instrumentation; artifacts; quality assurance/quality control of sonographic instruments; bioeffects and safety. Student laboratory scanning hours are included in this course.

#### DMSO 1050 - Abdominal Sonography I

*Prerequisites:* DMSO 1010; DMSO 1020. *Corequisite:* DMSO 1060. This course combines the didactic education of normal and abnormal abdominal with active student participation in classroom laboratory experience. Introduces advanced abdominal anatomy, sonographic appearance and procedures, pathology and pathophysiology for diagnostic medical sonography. Topics include: embryology; anatomy; protocols for all organs and organ systems of the abdomen and non-cardiac chest; variants of normal and congenital anomalies; function of organ and organ systems; patient history and indications for examination; scanning techniques; normal sonographic appearance; pathology and pathophysiology; related imaging and functional testing results; normal and abnormal Doppler and color flow characteristics.

#### DMSO 1060 - Clinical Sonography I

*Prerequisite:* DMSO 1030. Provides students with a more detailed introduction into the hospital, clinic or other patient care setting work experience. This course covers the control of the physical parameters of the sonography unit and application of sonographic physics as it relates to image quality. Sonographic examinations are conducted under direct and indirect supervision. Topics include: oral and written communication; provide basic patient care; equipment manipulation for optimum image resolution; ergonomically correct scanning techniques; perform basic sonographic examinations of normal and abnormal abdominal anatomy and superficial structures; related imaging procedures and relevant laboratory findings; students must demonstrate progression of knowledge and scanning skills during this clinical rotation.

### DMSO 1070 - Pelvic Sonography and First Trimester Obstetrics

*Prerequisites:* DMSO 1010; DMSO 1020. This course introduces gynecology physiology, pathology, and pathophysiology along with normal and abnormal embryonic and fetal development during the first trimester using diagnostic medical sonography. Topics include: the role of the sonographer in obstetric imaging; antepartum obstetric sonography evaluation; Doppler imaging for the obstetric patient; significant laboratory values in early pregnancy; anatomy, physiology, pathology and pathophysiology of the female pelvis; gynecologic patient care and imaging techniques; clinical assessment of obstetrical patient; normal first trimester; uterine and extrauterine assessment during the first trimester; first trimester complications; prudent use; and performance standards and documentation.

#### DMSO 1080 - Sonographic Physics and Instrumentation Registry Review 1

*Prerequisite:* DMSO 1040. Provides a review of knowledge from previous courses and helps the student prepare for national certification examinations for sonography. Information concerning test taking skills will also be reviewed. Topics include: patient care, safety and communication; physics principles, ultrasound transducers, pulse-echo instrumentation, Doppler instrumentation; and quality assurance/quality control of equipment.

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#### **DMSO 1090 - Introduction to Vascular Sonography**

*Prerequisites:* DMSO 1010; DMSO 1020; DMSO 1040; DMSO 1060. This course is designed as an introduction into the field of vascular sonography. The general practitioner will be required to perform venous examinations of the lower extremity, arterial studies of the neck, and some Doppler studies within the abdomen. Emphasis is on the functional workings and settings associated with Doppler signals and waveforms. Topics include: machine/image settings for Doppler imaging; venous imaging of the lower extremities; arterial imaging of the neck; and vascular imaging of the abdomen, including aorta and its primary branches, vena cava, portal and hepatic veins, and renal arteries and veins.

#### DMSO 1100 - Clinical Sonography II

*Prerequisite:* DMSO 1060. *Corequisite:* DMSO 1070. This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students conduct sonographic examinations under direct and indirect supervision while continuing to improve their communication, professionalism and critical thinking skills. Topics include: patient care issues; advanced scanning techniques; normal anatomy and pathologic conditions of the abdomen; normal and abnormal sonographic imaging of the male pelvis; normal and abnormal anatomy and pathology of the female pelvis; normal and abnormal uterine and fetal development through the first trimester; and introduction to vascular sonography.

#### DMSO 2010 - OB Second and Third Trimesters

*Prerequisites:* DMSO 1020; DMSO 1070. Using classroom instruction and laboratory experiences this course introduces the knowledge of fetal anatomy, pathology, pathophysiology and procedures for diagnostic medical sonography. Instruction emphasizes normal fetal growth, fetal anomalies and maternal complications throughout all the second and third trimesters. Topics include: fetal assessment in the normal second and third trimesters; extra-fetal assessment of the second and third trimesters; assess abnormal fetal growth; high risk obstetrics; fetal structural abnormalities; genetic abnormalities and syndromes; interventional procedures; post partum complications; prudent use; and performance standards and documentation.

#### **DMSO 2020 - Specialized Sonographic Procedures**

This course provides students with three independent areas of concentration. They are High Resolution Sonography, Interventional Sonography and Pediatric Sonography. I. High Resolution Sonography introduces superficial structure anatomy, pathology and procedures for diagnostic medical sonography. II. Interventional Sonography this course provides instruction in sonographic procedures which are considered invasive and/ or require sterile procedures. III. Pediatric Sonography provides the sonography student with specialized imaging procedures for the pediatric patient. Topics include: Intervention Sonography- use of sonography in interventional procedures, transducer care, infection control, response to medical emergencies, contrast media, and organ transplant; High Resolution Sonography contrast media, and organ transplant; High Resolution Imaging anatomy and normal variants, function and physiology, indications for examination, sonography, employ, anatomy and normal variants, function and physiology, indications for examination, sonography, embryology, anatomy and normal variants, function and physiology, indications for examination, sonography, embryology, and pathology and pathophysiology.

#### DMSO 2030 - Clinical Sonography III

*Prerequisite:* DMSO 1100. This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students improve skills in performing sonographic procedures previously introduced. Topics include: normal uterine and fetal development through the three trimesters including placental grading; equipment manipulation for optimum resolution; manipulation of equipment to minimize biological effects; normal anatomy and pathologic conditions of the abdomen and female pelvis; fetal biometry including gestational sac size, crown-rump length, bi-parietal diameter and head circumference; ectopic pregnancies; normal anatomy of the venous and arterial systems of the body; abnormal conditions of the human vasculature system; patient care issues; and demonstration of significant progression of knowledge and scanning skills.

### DMSO 2040 - Comprehensive ABD and OB/GYN Registry Review

*Prerequisite:* DMSO 1070; DMSO 2010. Provides a review of knowledge from previous courses and helps the student prepare for ARDMS national certification examinations for sonography. Information concerning test taking skills is also reviewed. Topics include: patient care, preparation and technique; instrumentation, normal pelvic anatomy; abnormal pelvic anatomy; extra-pelvic pathology associated with gynecology; pediatric sonography; post menopause; infertility and endocrinology; first trimester; placenta, amniotic fluid, umbilical cord; second and third trimester; congenital fetal anomalies; complications during pregnancy; fetal demise; coexisting disorders; HIPPA and patient care techniques utilizing a professional sonographer; anatomy and physiology of abdominal structures, small parts, and superficial structures; patient preparation and protocols for sonographic examination of abdominal structure; clinical indications, pertinent related diagnostic imaging procedures and laboratory tests; sonographic features and/or patterns of pathology in the abdomen, small parts; and instrumentation.

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#### **DMSO 2050 - Clinical Sonography IV**

*Prerequisite:* DMSO 2030. Provides a culminating work experience in the hospital, clinic or other patient care setting for students to improve skills in performing procedures introduced during prior clinical and didactic courses to the level of an entry-level sonographer. Topics include: refinement of equipment manipulation techniques, performance of sonographic examinations as an entry-level sonographer, role of the sonographer in performing interventional/invasive procedures, and completion of necessary competency requirements for graduation.

#### **DRFT 2000 - Public Works Infrastructure**

This course introduces the student to the methods of maintaining the most common public works infrastructures. Emphasis will be placed on the different aspects of roadway maintenance, utility maintenance, and fleet management.

#### DRFT 2005 - Plan Reading

This course introduces the reading and interpretation of construction drawings. Topics include: roadway plans, right of way, plan notations and symbols, and Georgia standards and specifications.

#### **DRFT 2010 - Construction Materials**

*Prerequisite:* MATH 1013. This course covers the fundamental construction materials and their engineering properties. Material properties such as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, materials testing, and material selection and use.

#### **DRFT 2020 - Construction Materials and Cost Estimating**

*Prerequisite:* DRFT 2000. This course introduces the student to roadway and bridge construction materials and to cost estimation methods for a roadway project or project components. Topics include: initial construction, pavement construction, bridge construction, and cost estimating.

#### **DRFT 2030 - Project Management**

*Prerequisite:* DRFT 2000. *Corequisite:* DRFT 2040. This course introduces the student to the basic concepts and procedures used in managing a highway construction project. Emphasis will be placed on administering the contract and ensuring that construction is completed according to the contract. Topics include: contract administration, specifications, documentation, and project management.

#### DRFT 2040 - Highway Design

*Prerequisite:* DRFT 2000. This course provides students with a basic understanding of design and construction of roadway and highway systems. Major topics include: geometric design, drainage design and computation, storm water management, and erosion control.

#### DRFT 2050 - Surveying I

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*Prerequisite:* MATH 1015. Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

#### DRFT 2060 - Route Location and Design

*Prerequisite:* DRFT 2050. *Corequisite:* MATH 1015. Provides the fundamentals of proper highway design. Students have opportunities to participate in actual field stakeout, measurement, and solution of design problems given specific parameters. Topics include: land transportation systems; ground and aerial route survey methods; circular, compound, reverse, and parabolic curves and spirals; highway design safety and limitations; intersections and interchanges; plot and field stakeout; and topographic planning.

#### **DRFT 2070 - Civil Tech Internship**

*Prerequisites:* DRFT 2000; DRFT 2005; DRFT 2010; DRFT 2020; DRFT 2040; DRFT 2050. *Corequisites:* DRFT 2030; DRFT 2060. Provides student work experience in the occupational environment. Topics include: application of Civil Technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

#### ECCE 1101 - Introduction to Early Childhood Care and Education

*Prerequisite:* Provisional admission. This course introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. Topics include historical perspectives; professionalism; guidance; developmentally appropriate practices; learning environment (including all children); cultural diversity; and licensing, accreditation, and credentialing.

#### ECCE 1103 - Child Growth and Development

*Prerequisite:* Provisional admission. Introduces the student to the physical, social, emotional, and cognitive development of the young child (prenatal through 12 years of age). The course provides for competency development in observing, recording, and interpreting growth and development stages in the young child; advancing physical and intellectual competence; supporting social and emotional development; and examining relationships between child development and positive guidance. Topics include developmental characteristics, prenatal through age 12, developmental guidance applications, observing and recording techniques, ages and stages of development, and introduction to children with special needs.

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### ECCE 1105 - Health, Safety, and Nutrition

Prerequisite: Provisional admission. The course introduces 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.

### ECCE 1112 - Curriculum and Assessment

Prerequisites/Corequisites: ECCE 1103. This course provides the student with an understanding of developmentally effective approaches to teaching, learning, observing, documenting and assessment strategies that promote positive development for young children. The course will enable the student to establish a learning environment appropriate for young children and to identify the goals, benefits, and uses of assessment in the development of curriculum for young children. Topics include observing, documenting, and assessing; learning environments; development of curriculum plans and materials; curriculum approaches; and instructional media.

#### ECCE 1113 - Creative Activities for Children

Prerequisite: Provisional admission. This course introduces the concepts related to creativity in art, music, movement and creative drama, and facilitating children's creative expression across the curriculum. Topics include concepts of creativity and expression; theories of young children's creative development; facilitation of children's creative expression, media, methods and materials across the curriculum; appreciation of children's art processes and products; appreciation of children's creativity in music, movement and dance; appreciation of children's creative expression in play and creative drama; and art and music appreciation.

#### ECCE 1121 - Early Childhood Care and Education Practicum

Prerequisite/Corequisite: ECCE 1105. This course provides the student with the opportunity to gain a supervised experience in a practicum placement site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

#### ECCE 1125 - Professionalism Through CDA Certificate Preparation

Prerequisite: Provisional admission. Provides training in professionalism through Child Development Associate Credentialing Certificate preparation in the following areas: applying for the Child Development Associate Credential through Direct Assessment, professional resource file development, and strategies to establish positive and productive relationships with families. Only offered in the FALL semester.

#### ECCE 2115 - Language and Literacy

Prerequisite/Corequisite: ECCE 1103. This course develops knowledge, skills, and abilities in supporting young children's literacy acquisition and development, birth through age twelve. Topics include developmental continuum of reading and writing, literacy acquisition birth to five years of age, literacy acquisition in kindergarten, literacy acquisition in early grades, and literacy acquisition in children who are culturally and linguistically diverse.

#### ECCE 2116 - Math and Science

Prerequisite/Corequisite: ECCE 1103. This course presents the process of introducing math and science concepts to young children. Includes planning and implementation of developmentally appropriate activities and development of math and science materials, media and methods. Topics include inquiry approach to learning; cognitive stages and developmental processes in developing math and science concepts with children birth to five; cognitive stages and developmental processes in developing math and science concepts with children in kindergarten and primary grades; planning math and science activities; and development of math and science materials, media and methods.

#### ECCE 2201 - Exceptionalities

Prerequisite: ECCE 1103. This course provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately quide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical and motor impairments, gifted/talented, intellectual and cognitive disabilities, emotional and behavioral disorders, communication disorders in speech and language, autism spectrum disorders, visual impairments, deaf and hard of hearing, health impairments, multiple disabilities, and community resources.

#### ECCE 2202 - Social Issues and Family Involvement

Prerequisite: Provisional admission. Enables the student to value the complex characteristics of children's families and communities and to develop culturally responsive practices which will support family partnerships. Students use their understanding to build reciprocal relationships which promote children's development and learning. Students are introduced to local programs and agencies that offer services to children and families within the community. Topics include professional responsibilities, family/social issues, community resources, family education and support, teacher-family communication, community partnerships, social diversity and anti-bias concerns, successful transitions, and school-family activities.

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#### ECCE 2203 - Guidance and Classroom Management

Prerequisite/Corequisite: ECCE 1103. Examines effective guidance practices in group settings based upon the application of theoretical models of child development and of developmentally appropriate practices. Focus will be given to individual, family, and cultural diversity. Topics will include developmentally appropriate child guidance (birth through 12); effective classroom management, including preventive and interventive techniques; understanding challenging behaviors; and implementing guidance plans.

#### ECCE 2240 - Early Childhood Care and Education Internship

Prerequisites: ECCE 1101; ECCE 1103; ECCE 1105; ECCE 1112. Corequisites: ECCE 1113; ECCE 2115; ECCE 2116; ECCE 2020. Provides the student with the opportunity to gain a supervised experience in an actual or simulated work site allowing demonstration of techniques obtained from course work. Practicum topics include promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; becoming a professional; and guidance techniques and classroom management.

#### ECCE 2310 - Paraprofessional Methods and Materials

Prerequisite/Corequisite: ECCE 1103. This course develops the instructional skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary age children. Topics include assessment and curriculum, instructional techniques, and methods for instruction in a learning environment.

#### ECCE 2312 - Paraprofessional Roles and Practices

Prerequisite/Corequisite: ECCE 1103. Develops skills to enable the student to work as a paraprofessional in a program for kindergarten through elementary aged children. Topics include professional qualifications, professional and ethical conduct, professionalism and employment, and paraprofessional roles and responsibilities.

#### ECCE 2320 - Program Administration and Facility Management

Prerequisite: Provisional admission. Provides training in planning, implementation, and maintenance of an effective early childhood program and facility. Topics include organization, mission, philosophy, goals of a program; types of programs; laws, rules, regulations, accreditation, and program evaluation; needs assessment; administrative roles and board of directors; anti-bias program development; child development and developmentally appropriate practices; marketing, public and community relations, grouping, enrollment and retention; working with families; professionalism and work ethics; space management; money management; and program, equipment, and supplies management. Only offered in the FALL semester.

#### ECCE 2322 - Personnel Management

Prerequisite: Provisional admission. Provides training in early childhood personnel management. Topics include staff records; communication; personnel policies; managing payroll; recruitment, interviewing, selection, hiring, motivating, and firing; staff retention; staff scheduling; staff development; staff supervision; conflict resolution; staff evaluations; ethical responsibilities to employees; and time and stress management. Only offered in the FALL semester.

#### ECCE 2330 - Infant/Toddler Development

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. Only offered in the SPRING semester.

#### ECCE 2332 - Infant/Toddler Group Care and Curriculum

Prerequisite: Provisional admission. This course provides the knowledge, skills and attitudes necessary to meet the fundamental needs of children from birth to three in group care settings. Establishes a foundation for a responsive, relationship-based curriculum for children birth to three who are in group care settings. Introduces the philosophy behind primary care, continuity of care, and respectful care. Explores ways of creating environments for infant/toddler group care which foster optimum social/emotional, physical and cognitive development, promote cultural sensitivity and encourage positive parent caregiver relations. Only offered in the SPRING semester.

#### ECCE 2340 - Family Child Care Program Management

Prerequisite: Provisional admission and ECCE 1103. Provides the guidelines, responsibilities, and appropriate practices needed for successful management of a Family Child Care Home. Provides guidelines and responsibilities for professional business practices associated with the successful establishment and administration of a Family Child Care Home. Topics include business plans, budgeting, taxes, marketing, record keeping, and professional qualifications. Only offered in the SUMMER semester.

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#### ECCE 2342 - Family Child Care Business Management

Prerequisite: Provisional admission. Provides quidelines and responsibilities for professional business practices associated with the successful establishment and administration of a Family Child Care Home. Topics include: business plans; budgeting; taxes; marketing, record keeping and professional qualifications. Only offered in the SUMMER semester.

#### ECCE 2350 - Early Adolescent Development

Prerequisite: Program admission. Introduces the student to the physical, social, emotional, and intellectual development of the early adolescent (12-15 years of age). Provides learning experiences related to the principles of human growth, development, and maturation, and theories of learning and behavior. Topics include developmental characteristics, guidance techniques, and developmentally appropriate practice.

### ECCE 2352 - Designing Programs/Environments for School Age Youth

Prerequisite: Program admission. Provides the student with information about preparing appropriate environments and planning and implementing activities for school age children and youth. This class includes 30 hours of lab, during which the student will be observed implementing the concepts learned in class. Topics include space design, varied choices and program activities to promote interest in: athletic/physical development, community involvement, cultural arts literacy, math, science and technology, and positive social relationships.

#### ECCE 2360 - Classroom Strategies for Exceptional Children

Prerequisite/Corequisite: ECCE 2201. Prepares child care providers and paraprofessionals with knowledge and skills in the areas of working effectively with children with a disability; working with families as partners; examining the laws and regulations; exploring resources, service providers, and agencies that may assist the child and his/her family; examining the adaptations and modifications to facilities and environments; reviewing the referral process; implementing inclusion; modifying instruction to accommodate the child with special needs; and investigating ways to document and chart observations. Only offered in the SPRING semester.

#### ECCE 2362 - Exploring Your Role in the Exceptional Environment

Prerequisite/Corequisite: ECCE 2201. Prepares child care providers and paraprofessionals with knowledge and skills for screening and assessing purposes; and explores resources, service providers, and agencies that may assist the child and families in educational or natural settings. Examines adaptations, accommodations, and modifications to environments; reviews the referral process; implements inclusion and modifies instruction to accommodate the child with special needs. Only offered in the SPRING semester.

#### ECHO 1100 - Introduction to Echocardiography

Prerequisite: Program admission. This course introduces the basic principles and applications of the physical assessment and echocardiographic procedures. Discussion of medical law and ethics as it relates to the professional scope of practice. Topics include: basic echocardiographic imaging principles, patient skills and equipment instrumentation, basic Doppler and color principles, medical law and ethics and common terminology and abbreviations.

#### ECHO 1110 - Non-Invasive Cardiovascular Fundamentals

Prerequisite: Program admission. Introduces the basic principles and applications of physical assessment, of non-invasive cardiovascular procedures. Topics include: introduction to measurements: chamber dimensions, velocities, systole, and diastole; patient and equipment skills related to instrumentation; physical principles: heart sounds, imaging of the cardiovascular system; echocardiography and vascular technology: basic views, terminology, physical principles, and instrumentation; and tomographic anatomy.

#### ECHO 1310 - Echocardiography I

Prerequisite: ECHO 1100. This course utilizes cardiac sonography fundamentals to evaluate cardiac anatomy, function and hemodynamics in diagnosing coronary artery heart disease. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis on performance and interpretation of M-mode, 2-dimensional, and Doppler echocardiography. Emphasis will be placed on obtaining quality echocardiograms, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: ventricular function, coronary artery disease, Stress Echocardiography, Transesophageal Echocardiography (TEE), 3-D/4-D Echocardiography, Contrast Echocardiography and advanced techniques/procedures.

#### ECHO 1320 - Echocardiography II

Prerequisite: ECHO 1310. Corequisite: ECHO 1370. This course utilizes fundamentals to evaluate cardiac function and acquired disease states. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis on performance and interpretation of M-mode, 2-dimensional, and Doppler echocardiography. Emphasis will be placed on obtaining quality echocardiograms, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: valvular heart disease, cardiomyopathies, systemic and pulmonary hypertensive heart disease, pericardial diseases, systemic disease, cardiac transplantation, cardiac tumors/masses, diseases of the aorta, pericardial diseases, and miscellaneous topics.

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#### **ECHO 1360 - Introduction to Clinical Environment**

Prerequisite: ECHO 1100. Corequisite: ECHO 1310. Introduces echocardiography student to the clinical environment where clinical requirements are discussed and defined. The role and job description of the noninvasive cardiovascular technologist are evaluated. Students will participate in procedures in noninvasive cardiology labs and imaging centers under direct supervision of clinical instructor. Topics include: clinical environment; recording medical information/professionalism, clinical skills, medical ethics, professionalism, and hospital/medical office policies and procedures.

### ECHO 1370 - Echocardiography Clinical II

Prerequisites: ECHO 1100; ECHO 1310. Corequisite: ECHO 1320. Provides hands-on experience in performing noninvasive cardiovascular procedures with emphasis on instrumentation and development of clinical techniques. Topics include: policies and procedures, echocardiographic instrumentation, recording patient information, patient preparation, and performing echocardiographic examinations.

### ECHO 1550 - Professional Development

Prerequisites: Program admission. The purpose of the Case Study is to provide the opportunity for review and reinforcement of theoretical concepts with an evaluation of Echocardiography. The purpose of the Journal Review is to allow the student to study the current formats and methods of professional articles/presentations of echocardiography. Students will be asked to prepare and present interesting case studies to include clinical history, normal anatomy, clinical laboratory test modalities, protocols, techniques and findings. Topics include: identification of resources, literature review, formatting according to audience, citation of sources, written presentation skills, and oral presentation skills. Emphasis is placed on professional growth and preparation to enter the field of echocardiography as a contributing member.

#### ECHO 2310 – Pediatric Echocardiography

Prerequisites: ECHO 1310; ECHO 1320. This course offers an introduction to congenital heart disease with instruction on fetal cardiac embryology, pediatric pathology, age appropriate patient care, corrective surgical procedures. Emphasis is placed on the latest modalities and specialties of a pediatric noninvasive cardiac diagnostic study. Topics include: fetal cardiac embryology; acyanotic lesions; cyanotic lesions; complex congenital heart disease; corrective surgical procedures; Doppler, color flow, and 2D imaging; research methods; syndromes; sedation; and transducer selection.

### ECHO 2360 – Echocardiography Clinical III

Prerequisite: ECHO 1370, Corequisite: ECHO 2310, Provides hands-on experience in the clinical setting with an emphasis placed on the development of clinical techniques employed to obtain meaningful data. Continued participation by the student will progressively lead to the student performing diagnostic procedures with less assistance but under the supervision of an appropriately credentialed sonographer. Topics include: echocardiographic instrumentation, logging and reporting information, preparation for echocardiographic examinations, medical ethics, and performing echocardiographic procedures. Students may do a brief rotation through an invasive cardiology lab, pediatric lab and/or vascular lab.

### ECHO 2370 - Echocardiography Clinical IV

Prerequisite: ECHO 2360. This course builds on the knowledge and skills learned in Clinical Echo 3. By the end of this rotation, the student will perform all echocardiography procedures independently with the supervision of an appropriately credentialed sonographer. This course provides a culminating clinical setting experience which allows students to synthesize information and procedural instruction provided throughout the program. Emphasis is placed on skill level improvements and final completion of all required clinical competencies presented in previous courses and practiced in previous clinical vascular courses. Topics include: scanning, documentation of pathologies, patient and equipment skills, current literature, professionalism, and ethical behavior.

### ECHO 2400 - Comprehensive Registry Review

Corequisite: ECHO 2370. This course will be an overall review of Echocardiography to include demonstration of normal and abnormal cardiac anatomy, cardiac physiology, pathophysiology and hemodynamics/physics in the different types of cardiac disease/dysfunctions. Also included will be a review of clinical non-invasive cardiac diagnostic procedures, laboratory values, pharmacology and test validation and measurements. Emphasis is placed on reviewing information so that the student will successfully pass the ARMDS and/or CCI certification examinations. Topics include: normal and abnormal cardiac anatomy, techniques, pathology, physics/hemodynamics, test validation and measurements, and laboratory values.

#### **ECON 1101 - Principles of Economics**

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Prerequisite: Program admission. Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor: price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and United States economy in perspective.

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#### ECON 2105 – Macroeconomics

*Prerequisite:* Program admission. Provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

#### **ECON 2106 - Microeconomics**

Prerequisite: Program admission. Provides an analysis of the ways in which consumers and business firms interact in a market economy. Topics include basic economic principles, consumer choice, behavior of profit maximizing firms, modeling of perfect competition, monopoly, oligopoly and monopolistic competition.

#### ELCR 1005 - Soldering Technology

Prerequisite: Provisional admission. Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topics include: safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques.

#### ELCR 1010 - Direct Current Circuits

Prerequisites: MATH 1013; MATH 1111. This course provides instruction in the theory and practical application of simple and complex direct current circuitry. Topics include laboratory safety practices and procedures, electrical laws and principles, DC test equipment basic series, parallel and combination circuits, complex series and parallel circuits, and DC theorems.

### ELCR 1020 - Alternating Current Circuits

*Prerequisite:* ELCR 1010. This course introduces the theory and application of varying sine wave voltages and current, and continues the development of AC concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and practical application. Topics include AC wave generation, frequency and phase relationship, impedance, admittance, and conductance power factors, reactive components simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

#### ELCR 1030 - Solid State Devices

Prerequisite: ELCR 1020. This course provides instruction in the theory and application of solid state devices in the electronics industry. Emphasis is placed on the physical characteristics and uses of solid state devices. Topics include PN diodes, power supplies, voltage regulation, bipolar junction theory and application, field effect transistors, and special applications.

#### ELCR 1040 - Digital and Microprocessor Fundamentals

Prerequisite: ELCR 1020. Corequisite: ELCR 1030. This course is designed to provide sufficient coverage of digital electronics and microprocessor fundamentals. Digital fundamentals will introduce basic topics such as binary topics such as binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment. Upon completion of the foundational digital requirements, a more advanced study of digital devices and circuits will include such topics as flip-flops, counters, multiplexers and de-multiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions. Students will also explore the basic architecture and hardware concepts of the microprocessor.

#### ELCR 1060 - Linear Integrated Circuits

#### Prerequisite: ELCR 1030. Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

#### ELCR 2110 - Process Control

Prerequisite: ELCR 1030. 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.

#### ELCR 2120 - Motor Controls

Prerequisite: ELCR 1030. 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.

#### ELCR 2130 - Programmable Controllers

Prerequisite: ELCR 1030. Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

#### ELCR 2140 - Mechanical Devices

Prerequisite: Program admission. 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.

#### ELCR 2150 - Fluid Power

Prerequisite: Program admission. 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.

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#### ELCR 2160 - Advanced Microprocessors and Robotics

Prerequisites: ELCR 2130; ELCR 2140; ELCR 2150. This course continues an earlier study of microprocessor fundamentals and introduces robotic theory and application. Topics include the microprocessor instruction set, programming and debugging applications and troubleshooting, microprocessor applications for embedded systems, basic DSP concepts, robotic terminology and languages, and robotic programming.

#### ELTR 1020 - Electrical Systems Basics I

*Prerequisites:* MATH 1012. 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.

### ELTR 1060 - Electrical Prints, Schematics, and Symbols

Prerequisite: Provisional admission. Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, print reading and scales and measurement.

#### ELTR 1080 - Commercial Wiring I

Prerequisite: ELTR 1020. This course introduces commercial wiring practices and procedures. Topics include industrial safety procedures, the National Electrical Code, and commercial load calculations.

#### ELTR 1090 - Commercial Wiring II

Prerequisite: ELTR 1020. Corequisite: ELTR 1080. This course is a continuation of the study in commercial wiring practices and procedures. Topics include transformer connections, an introduction to low voltage systems, conduit design and installation practices, and system design concepts.

#### **ELTR 1110 - Electric Motors**

Prerequisites: ELTR 1020; IDFC 1005. Introduces the fundamental theories and applications of single-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification, NEMA standards, motor efficiencies, preventive maintenance, troubleshooting/failure analysis, and NEC requirements.

#### ELTR 1120 - Variable Speed/Low Voltage Controls

Prerequisite: ELTR 1110. 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.

#### **ELTR 1180 - Electrical Controls**

Prerequisites: ELTR 1020; IDFC 1005. Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams. Topics include: ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, and application and operation of controllers and controls.

#### ELTR 1205 - Residential Wiring I

Corequisite: ELTR 1210. Introduces residential wiring practices and procedures. Topics include: residential circuits, print reading, National Electrical Code, and wiring materials.

#### ELTR 1210 - Residential Wiring II Corequisite: ELTR 1205. Provides additional instruction on wiring practices in accordance with National

# calculations, residential multifamily service calculations and installations, and equipment installations. **ELTR 1220 - Industrial PLC's**

Prerequisites: ELTR 1110; ELTR 1180. Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on pic 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.

#### ELTR 1250 - Diagnostic Troubleshooting

Prerequisite: ELTR 1180. 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.

#### ELTR 1260 - Transformers

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Prerequisites: ELTR 1080; ELTR 1090. 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.

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#### Electrical Code. Topics include: hand and power tools, branch circuits/feeders, residential single family load

### **ELTR 1270 - National Electrical Code Industrial Applications**

*Corequisites:* ELTR 1080; ELTR 1090. 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.

#### ELTR 1500 - Electrical Systems Technology Internship/Practicum

This course is designed to give students the opportunity to engage in a lab project or an off-site internship for the purpose of refining the skills necessary for gainful employment. The student is expected to have completed all program requirements to this point, and to be able to demonstrate efficiency in all skills mastered.

### ELTR 1510 - Electrical Worker

*Prerequisite:* Provisional admission. Introduces work hazards present during the construction of manufacturing homes or construction sites. Emphasis is placed on the proper use of electrical tools and equipment and maintenance of these tolls on the work site. Topics include hazards of electricity, safe use electrical tools and equipment, and the repair of electrical cords, plugs, lights, and smirches.

#### ELTR 1520 - Grounding and Bonding

*Prerequisite:* Provisional admission. Presents the theory and practical applications for grounding and bonding systems. Emphasis will be placed on the use of the requirements of the National Electrical Code. Topics include: branch circuit grounding, equipment grounding/bonding, service grounding/bonding, and earth connections.

### ELTR 1525 - Photovoltaic Systems

*Prerequisite:* ELTR 1210. This class introduces techniques and method on how to install residential and commercial photovoltaic systems.

#### ELTR 1530 - Conduit Sizing

*Prerequisite:* Program admission. Provides practice in calculating conduit size. Emphasis is placed on use of the requirement of the National Electrical Code. Topics include: National Electrical Code, conduits types/ trade sizes, and percent of fill.

#### ELTR 1540 - Wire Pulling and Codes

*Prerequisite:* Provisional admission. The purpose of this course is for instruction in the installation of cabling systems. Emphasis will be on the types of cabling technologies that address voice, video, and data communications and the applicable codes.

### EMPL 1000 – Interpersonal Relations and Professional Development

*Prerequisite:* Provisional admission. Emphasizes human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations skills, job acquisition skills and communication, job retention skills, job advancement skills, and professional image skills.

#### **EMSP 1010 - Emergency Medical Responder**

*Prerequisite:* Program admission. The Emergency Medical Responder (EMR) course prepares the student to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility. Major areas of instruction include Introductory Medical Terminology and Anatomy & Physiology; Responder Safety; Incident Command; Bloodborne Pathogen Training; Basic Physical Assessment; and Treatment of Trauma and Medical Emergencies; Cardiopulmonary Resuscitation and the use of Automatic External Defibrillators. The course is a blend of lecture, hands on lab/learning, and practical scenario based learning/testing. The course will include Healthcare Provider CPR/AED Certification from a Nationally Recognized Body (American Heart Association, Red Cross, etc.). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Responder (EMR) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; Life Span Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

#### EMSP 1110 - Introduction to the EMT Profession

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Prerequisite: Program admission. This course serves as the introductory course to the Emergency Medical Services (EMS) profession. It orients the student to the prehospital care environment, issues related to the provision of patient care in both in-hospital and out-of-hospital circumstances. It further provides foundational information upon which subsequent curriculum content is based so that successful completion of this content increases the potential for success in subsequent courses and should allow students to apply the fundamental knowledge, skills, and attitudes gained in order to effectively communicate and function safely, ethically and professionally within the emergency medical services environment. Topics include: Anatomy and Physiology, Medical Terminology, Pathophysiology, CPR for HCP, EMS Systems, Research, Workforce Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics, Public Health, Principles of Safely Operating a Ground Ambulance, Incident Management, Multiple Casualty Incidents, Air Medical, Vehicle Extrication, HazMat, MCI due to Terrorism/Disaster, and Life Span Development.

### EMSP 1120 - EMT Assessment/Airway Management and Pharmacology

Prerequisite: Program admission. This course prepares students for initial scene management and assessment of patients as well as management of the airway. Introduction to pharmacology is also covered. Includes application of scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. Topics include: Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; Reassessment; Airway Management; Respiration; Artificial Ventilation; Principles of Pharmacology; Medication Administration; and Emergency Medications.

### EMSP 1130 - Medical Emergencies for the EMT

Prerequisite: Program admission. This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan of cases involving non-traumatic medical emergencies. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculoskeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Medical Assessments.

### **EMSP 1140 - Special Patient Populations**

*Prerequisite:* Program admission. This course provides a fundamental knowledge of growth, development. and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Topics include: Obstetrics, Gynecology, Neonatal Care, Pediatrics, Geriatrics, Patients with Special Challenges, and Special Patient Populations - Assessments.

### EMSP 1150 - Shock and Trauma for the EMT

Prerequisite: Program admission. This course is designed to prepare the EMT student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies. Topics include: Shock and Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; and Multi-System Trauma.

## EMSP 1160 - Clinical and Practical Applications for the EMT

Prerequisite: Program admission. This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an EMT. Topics include: Clinicals and Assessment Based Management.

## EMSP 1510 - Advanced Concepts for the AEMT

Prerequisite: Program admission. This course serves as the introductory course to the advanced level practice of the Advanced Emergency Medical Technician (AEMT). It expands on the information attained at the EMT level. Topics include: EMS Systems: Documentation: EMS System Communication: Therapeutic Communication; Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; Artificial Ventilation; Primary Assessment; and Secondary Assessment.

## EMSP 1520 - Advanced Patient Care for the AEMT

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*Prerequisite:* Program admission. This course provides opportunities to apply fundamental knowledge of basic and selected advanced emergency care and transportation based on assessment findings for the following: an acutely ill patient; a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management; and an acutely injured patient. In addition it provides a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. Topics include: Geriatrics; Patients with Special Challenges; Medical Overview; Neurology; Immunology; Infectious Disease; Endocrine Disorders; Cardiovascular; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Shock and Resuscitation; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Head, Facial, Neck, and Spine Trauma: Nervous System Trauma; and Integration of Medical/Trauma Assessments.

#### EMSP 1530 - Clinical Applications for the AEMT

*Prerequisite:* Program admission. This course provides supervised clinical experience in various clinical settings. Topics include: Clinicals.

#### **EMSP 1540 - Clinical and Practical Applications for the AEMT**

*Prerequisite:* Program admission. This course provides supervised clinical experience in various clinical settings as well as opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of an AEMT. Topics include: Clinicals and Assessment Based Management.

#### EMSP 2110 - Foundations of Paramedicine

*Prerequisite:* Program admission. This course introduces the student to the role of the paramedic in today's healthcare system, with a focus on the prehospital setting. This course will also prepare the student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Topics include: EMS Systems; Research; Workforce Safety and Wellness; Documentation; EMS System Communication; Therapeutic Communication; Medical/Legal and Ethics; Life Span Development; Public Health; Incident Management; Air Medical; Scene Size-Up; Primary Assessment; History Taking; Secondary Assessment; Monitoring Devices; and Reassessment.

### **EMSP 2120 - Applications of Pathophysiology for Paramedics**

*Prerequisite:* Program admission. This course expands the concepts of pathophysiology as it correlates to disease processes. This course will enable the student to apply the general concepts of pathophysiology to the assessment and management of patients in the emergency setting. Topics include: Pathophysiology.

#### **EMSP 2130 - Advanced Resuscitative Skills for Paramedics**

*Prerequisite:* Program admission. This course will equip the paramedicine student with an expanded knowledge of pharmacology, as well as skills used to manage the respiratory system. Students will learn to use these advanced resuscitative skills to mitigate patient care emergencies, and to improve the overall health of the patient. Topics include: Principles of Pharmacology; Medication Administration; Emergency Medications; Airway Management; Respiration; and Artificial Ventilation.

#### EMSP 2140 - Advanced Cardiovascular Concepts

*Prerequisite:* Program admission. This course equips the paramedicine student with an expanded knowledge of the anatomy, physiology, and electrophysiology of the cardiovascular system. Students will also examine the epidemiology of cardiovascular disease, and will begin to integrate advanced assessment skills (including ECG interpretation) into the assessment of cardiac patients. Topics include: Anatomy, Physiology, and Electrophysiology of the Cardiovascular System; Epidemiology of Cardiovascular Disease; Assessment of the Cardiac Patient; Electrocardiographic (ECG) interpretation.

#### EMSP 2310 - Therapeutic Modalities of Cardiovascular Care

*Prerequisite:* Program admission. This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a cardiovascular emergency. Topics include: Cardiovascular Emergencies and Advanced Cardiovascular Life Support (ACLS).

### EMSP 2320 - Therapeutic Modalities of Medical Care

*Prerequisite:* Program admission. This course will enable the student to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient experiencing a medical emergency. Topics include: Medical Overview; Neurology; Abdominal and Gastrointestinal Disorders; Immunology; Infectious Disease; Endocrine Disorders; Psychiatric; Toxicology; Respiratory; Hematology; Genitourinary/Renal; Non-Traumatic Musculo-skeletal Disorders; Diseases of the Eyes, Ears, Nose, and Throat; and Assessment of Medical Emergencies.

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#### EMSP 2330 - Therapeutic Modalities of Trauma Care

Prereauisite: Program admission. This course will enable the student to integrate a comprehensive knowledge of causes and pathophysiology into the management of traumatic: cardiac arrest and peri-arrest states; shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will also include integrating assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. During this course, the student will complete a nationally recognized pre-hospital trauma course (i.e. PHTLS, ITLS, ATT, etc.). Topics include: Shock and Trauma Resuscitation; Trauma Overview; Bleeding; Chest Trauma; Abdominal and Genitourinary Trauma; Orthopedic Trauma; Soft Tissue Trauma; Head, Facial, Neck, and Spine Trauma; Nervous System Trauma; Special Considerations in Trauma; Environmental Emergencies; Multi-System Trauma; and Assessment of Trauma Emergencies.

#### **EMSP 2340 - Therapeutic Modalities for Special Patient Populations**

Prerequisite: Program admission. This course will enable the student to integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for various special patient populations. During this course, the student will also complete a nationally recognized pediatric course (i.e. EPC, PALS, PEPP, etc.). Topics include: Obstetrics; Gynecology; Neonatal Care; Pediatrics; Geriatrics; and Patients with Special Challenges.

#### EMSP 2510 - Clinical Applications for the Paramedic - I

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2510 Clinical Applications for the Paramedic - I is one in a series of courses that also includes: EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2520 - Clinical Applications for the Paramedic - II

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2520 Clinical Applications for the Paramedic - II is one in a series of courses that also includes: EMSP 2510, EMSP 2530, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2530 - Clinical Applications for the Paramedic - III

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2530 Clinical Applications for the Paramedic - III is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2540, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2540 - Clinical Applications for the Paramedic - IV

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2540 Clinical Applications for the Paramedic - IV is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2550, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2550 - Clinical Applications for the Paramedic - V

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2550 Clinical Applications for the Paramedic - V is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2560 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2560 - Clinical Applications for the Paramedic - VI

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2560 Clinical Applications for the Paramedic - VI is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2570. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2570 - Clinical Applications for the Paramedic - VII

Prerequisite: Program admission. This course provides the paramedicine student with supervised clinical experience in various clinical settings. EMSP 2570 Clinical Applications for the Paramedic - VII is one in a series of courses that also includes: EMSP 2510, EMSP 2520, EMSP 2530, EMSP 2540, EMSP 2550 and EMSP 2560. The successful completion of all of these will result in meeting all clinical standards required by the State Office of Emergency Medical Services and Trauma (SOEMST). Topics include: Clinicals.

#### EMSP 2710 - Field Internship for the Paramedic

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Prerequisite: Program admission. Provides supervised field internship experience in the prehospital advanced life support setting. Topics include: Field Internship.

# EMSP 2720 - Practical Applications for the Paramedic

Prerequisite: Program admission. Allows opportunities to demonstrate critical thinking skills and assessment based management techniques through competency based evaluations relevant to the practice of a Paramedic. Topics include: Assessment Based Management for Paramedics.

# ENGL 0096 – English I

Prerequisite: Appropriate Placement Test Score. Emphasizes standard English usage. Topics include: capitalization, basic punctuation, subject and verb agreement, correct verb forms, spelling, and basic paragraph development.

### ENGL 0097 - English II

Prerequisite: Appropriate Placement Test Score or ENGL 0096. Emphasizes the rules of grammar, punctuation, capitalization, spelling, and writing in order to ensure a smooth transition into communicating orally and in writing. Topics include basic grammar, basic mechanics, spelling, and writing skills.

### ENGL 0098 English III

#### Prerequisite: Appropriate Placement Test Score or ENGL 0097. Emphasizes the ability to communicate using written methods. Topics include writing, grammar, and revising.

### ENGL 1010 – Fundamentals of English I

Prerequisite: ENGL 0097 or entrance English score in accordance with approved TCSG admission score levels and READ 0097 or entrance reading score in accordance with approved TCSG admission score levels. Emphasizes the development and improvement of written and oral communication abilities. Topics include analysis of writing, applied grammar and writing skills, editing and proofreading skills, research skills, and oral communication skills.

### ENGL 1012 - Fundamentals of English II

Prerequisite: ENGL 1010. Provides knowledge and application of written and oral communications found in the workplace. Topics include writing fundamentals and speaking fundamentals.

### ENGL 1101 – Composition and Rhetoric

Prerequisite: Program admission level language competency or ENGL 0098 and READ 0098. Explores the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience.

### ENGL 1102 – Literature and Composition

Prerequisite: ENGL 1101. Emphasizes the student's ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature.

### ENGL 1105 – Technical Communications

Prerequisite: ENGL 1101. Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include reference use and research, device and process description, formal technical report writing, business correspondence, and technical report presentation.

### ENGL 2130 – American Literature

Prerequisite: ENGL 1101. Emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills.

## FOSC 1206 - Introduction to Forensic Science

Prerequisite: Program Admission. This introductory course will provide a broad overview of the areas in forensic science covered in higher level courses. Topics include the recognition, identification, individualization and evaluation of various types of physical evidence, forensic science and the law, and ethics in forensic science. The relationship of forensic science to the natural sciences and the use of the scientific method in forensic science will also be explored.

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#### FOSC 2010 – Crime Scene Investigation I

Prerequisite: FOSC 1206. A study of the methods and techniques of scientific crime scene investigation and analysis using principles from biology, chemistry, and physics to document, recognize, preserve and collect physical evidence. Topics covered include video recording, photography, sketching, and searching of crime scenes along with proper collection and preservation methods.

#### FOSC 2011 - Crime Scene Investigation II

Prerequisite: FOSC 2010. Designed to follow Crime Scene Investigation I, this course focuses on the specialized scene techniques needed to investigate, analyze, process and reconstruct crime scenes. Topics will include presumptive testing, enhancement reagents, special scene techniques, bloodstain pattern analysis, shooting reconstruction, pattern recognition and crime scene reconstruction.

#### FOSC 2012 – Forensic Trace Evidence

Prerequisite: FOSC 1206. Trace evidence is often divided into two categories; chemistry and microscopy. This course is an introductory course in trace evidence to include the sub disciplines of hairs, fibers, arson, gunshot residue, explosives, paint, fracture match and fabric impression examinations and comparisons using microscopic and instrumental techniques. This course will also give the student who is interested in laboratory or CSI work practical experience in the area of trace evidence and how it relates to forensic science.

#### FOSC 2014 - Documentation and Report Preparation

Prerequisite: ENGL 1010 or ENGL 1101; FOSC 1206. The effectiveness of quality notes, reports and accurate documentation in the investigative process are explained and performed. Preparation of a report, chain of custody documents and other forms with proper content, mechanics, elements and format will also be explained and performed. Topics include field or bench notes, documentation of observations, factual report writing, property and evidence reports, business letters, memorandums, proper grammar, proper sentence structure and characteristics essential to quality report writing and document preparation.

#### FOSC 2033 - Death Investigation

Prerequisite: FOSC 1206. This course examines the fundamentals of a medicolegal death investigation, the operation of death investigation system and the role of the death investigator. Procedures required to assist the medical examiner/ coroner in determining the deceased persons cause and manner of death are discussed. Additional topics include autopsy technique, sudden and unexpected death, natural death, specific wound and injury characteristics, and child death.

#### FOSC 2035 - Forensic Photography

Prerequisite: FOSC 1206. The basic principles of photography generation and manipulation. Students will learn the basic camera operations including shutter speed, aperture, and lighting. Topics will include macro and micro photography, depth of field, digital cameras, and scene photography. Emphasis will be placed on the application of basic camera techniques to forensic science photography.

### FOSC 2037 - Victimology

Prerequisite: Program admission. While individuals have been crime victims for many years, victimology or the study of crime victims is a relatively recent discipline. The majority of criminological research and discussion has been focused on the offender rather than the victim. This course provides an overview of the principles and concepts of victimology, an analysis of victimization patterns and trends, and the role of victimology in the justice system. In addition the repercussions of victimization, victim reporting patterns and remedies available for victims are also explored.

#### **FOSC 2039 - Computer Forensics**

Prerequisite: COMP 1000. The main goal of this course is to provide students with an understanding of computer forensics and investigation tools and techniques. Students will gain a solid foundation in computer forensics and investigations. Most of the major personal computer operating system architectures and disk structures will be discussed. Students will learn how to set up an investigators office and laboratory, as well as what computer forensic hardware and software tools are available. Students will also learn the importance of digital evidence controls and how to process crime and incident scenes. Finally, students will learn the details of data acquisition, computer forensic analysis, e-mail investigations, image file recovery, investigative report writing, and expert witness requirements. The course provides a range of laboratory and hands-on assignments that teaches about theory as well as the practical application of computer forensic investigation.

#### FOSC 2040 - Forensic Firearms and Toolmark Identification

The course is an introduction to firearms, ammunition and ammunition components, microscopic comparison of questioned bullets, cartridge cases and toolmarks, distance determination, gunpowder and shotgun pattern analysis, serial number restoration, lock picking techniques, the examination of security devices such as padlocks and safes and the examination of firearm related injuries.

#### **FOSC 2041 - Latent Print Examination**

Prerequisite: Program admission.

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#### FOSC 2150 - Case Preparation and Courtroom Testimony

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*Prerequisite:* FOSC 1206. *Corequisite:* FOSC 2010. Examines the case file preparation, admissibility of evidence rulings, the criminal trial process, courtroom demeanor, and direct and cross examination techniques for courtroom testimony. Skills are performed in a mock courtroom setting by the students. Topics include fact and expert witnesses, pertinent case law, property and evidence reports, investigative and laboratory reports, preparation of the witness, witness credibility and proper courtroom appearance and demeanor.

### FRSC 1020 – Basic Firefighter - Emergency Services Fundamentals

Prerequisite: Program Admission. This course provides the student with information on the applicable laws, policies, and standards that the Firefighter I course is designed, and how the course will be administered. This course will provide the student basic knowledge of where and how the fire service originated from the colonial periods to present day firefighting operations. The student will learn basic roles and responsibilities of a firefighter, how firefighters have to abide by and work from standard operating procedures and guidelines, and how the chain of command works and their position within it. The student will be provided the knowledge on how to communicate within the fire service; whether it with the fire station or on the fire ground. This course provides the emergency responder with basic principles and functions of the Incident Command System. The course will provide the necessary knowledge and skills to operate within the ICS and their role within the ICS at the fire station, at a non-emergency scene, and at emergency scenes. It will provide also provide the emergency responder with knowledge on how to perform basic skills at emergency scenes that deal with infection control, cardiopulmonary resuscitation, basic first aid measures, and using an AED. Finally, it will provide the emergency responder skills and knowledge on how to recognize the presence of and the potential for a hazardous materials release, and how and who personnel should call. Upon completion of this course the student emergency responder candidate/recruit will have the basic skills and knowledge to be able to obtain a certificate of completion or become certified through the appropriate governing agency for the following: 1. Infection Control 2. CPR 3. First Aid 4. ICS-100 5. IS-700 6. NPQ - Hazardous Materials for First Responders Awareness Level This course meets the requirements NFPA 1001 Standard for Fire Fighter Professional Qualifications and all other state, local, and provincial occupational health and safety regulatory requirements.

### FRSC 1030 – Basic Firefighter – Module I

*Prerequisite:* Program admission. This course provides the firefighter candidate/recruit with basic knowledge and skills to perform various fire ground operations as a firefighter on emergency scenes. The candidate/ recruit will learn about safety during all phases of a firefighters career, the personal protective equipment that is required for training and every emergency response, and how to properly don it for use and doff it after use. The candidate/recruit will learn about the dynamics of fire through fire behavior and how to extinguish the different phases of fires with either portable fire extinguishers or through fire suppression attacks and techniques. The candidate/recruit will also learn the three tactical priorities of Life Safety, Incident Stabilization, and Property Conservation that have to be achieved on every fireground. Basic knowledge and skills will be provided to the candidate/recruit so they can achieve the tactical priorities through various fireground operations such as: response & size-up, forcible entry, ladders, search & rescue, ventilation, water supply, fire hose, fire nozzles, fire streams, salvage, and overhaul. Upon completion of this course the student emergency responder candidate/recruit will have the basic skills and knowledge to be able to obtain a certificate of completion or become certified through the appropriate governing agency for the following: 1. Module I This course meets the requirements NFPA 1001 Standard for Fire Fighter Professional Qualifications and all other state, local, and provincial occupational health and safety regulatory regulato

#### FRSC 1100- Introduction to the Fire Service

*Prerequisite:* Program admission. This course is a survey of the philosophy and history of Fire Protection, loss of property and life by fire, review of municipal fire defenses and the organization and function of the federal, state, county, city and private fire protection. Includes introduction to: fire technology education and the firefighter selection process; fire protection career opportunities; public fire protection; chemistry and physics of fire; public and private support organizations; fire department resources, fire department administration; support functions; training, fire prevention; codes and ordinances; fire protection systems and equipment; emergency incident management; and emergency operations.

#### FRSC 1110 - Fire Administration - Supervision and Leadership

*Prerequisite:* Program Admission. This course provides the necessary knowledge and skills for an emergency responder to become a successful fire officer. The student will learn how to become a responsible leader and supervisor to a crew of firefighters, how to manage a budget for the fire station, understand standard operating procedures, and be able to manage an incident. Also, an understanding of basic fire prevention methods, fire and building codes, and records systems will be covered throughout the course. Upon completion of this course the student emergency responder candidate/recruit will have the basic skills and knowledge to be able to qualify for a certificate of completion or seek certification through the appropriate governing agency for the following: 1. NFA Leadership I 2. NFA Leadership II 3. NFA Leadership III This course meets the requirements NFPA 1021 Standard for Fire Officer Professional Qualifications and all other state, local, and provincial occupational health and safety regulatory requirements.

#### FRSC 1121 - Firefighting Strategy and Tactics

*Prerequisite:* Program Admission. This course presents the principles of applying fire department resources to mitigate a fire or related emergency. General topics include: principles of firefighting, size up, engine company operations, hose line selection and placement, water supply, standpipe and sprinkler operations, ladder company operations, forcible entry, ventilation and search and rescue. Specific-fires reviewed will include private dwellings, multiple dwellings, commercial buildings, high-rise structures, buildings under construction, structural collapse, flammable liquid and gas fires and waterfront fires.

#### FRSC 1132 - Fire Service Instructor

*Prequisite:* Program Admission. Students will learn to analyze jobs and information, then prepare and present related training. Emphasis is placed on planning, organizing, presenting, and testing, using methodologies appropriate to the subject. Topics include: orientation to emergency services instruction, communication, planning and analysis, objectives, learning, assessment, methods of instruction, instructor materials, media, training related group dynamics, classroom management, the legal environment, and NPQ Fire Instructor I. Students will have numerous hands-on opportunities to apply what they learn. Successful completers of FRSC 1132 are qualified to test for the National Professional Qualification (NPQ) Fire Instructor I Exam.

#### **FRSC 1141 – Hazardous Materials Operations**

*Prequisite:* Program Admission; NPQ FF I and NPQ Hazardous Materials Awareness Level. This course provides emergency responder personnel with the information to respond safely, limit possible exposure to all personnel, and to provide information to the proper authorities as being a primary goal while reacting in the defensive mode of operation. The first responder operations level responsibilities are recognition and identification of a hazardous material scene, the gathering of information, the notification of the proper authorities, the isolation of the area by setting perimeters/zones, possible evacuation, protection by initiating the incident management system, emergency decontamination, and performing defensive actions only. Even though the first responder is a member of an emergency response service, they are not trained in specialized protective clothing or specialized control equipment. Thus, the first responder is not a member of a hazardous materials response team. This course meets the requirements of NFPA 472 - Professional Competence of First Responders to Haz Mat Incidents at the Operations Level. This course also meets the requirements of OSHA 29 CFR 1910.120, EPA, USDOT, and all other appropriate state, local and provincial occupational health and safety regulatory requirements.

#### FRSC 1151 - Fire Prevention and Inspection

*Prerequisite:* Program admission. Emphasis is placed on the shared responsibility of all fire service personnel to prevent fires and fire losses by survey of fire prevention activities, conducting basic fire prevention inspections, practicing life safety codes, review of local and state laws regarding fire inspection, and review of applicable codes and standards. Topics include: code administration, inspection, use and occupancy, building limitations and types of construction, fire resistive construction elements, installation of fire protection systems, mean of egress, interior finish requirements, general fire safety provisions, maintenance of fire protection systems, means of egress maintenance for occupancies, hazardous materials, flammable liquids and aerosols, detonation and deflagration hazards, hazardous assembly occupancies, other storage and processing occupancies, compressed gases and cryogenic liquids, pesticides and other health hazards, and using referenced standards. Successful completion of FRSC 1151 qualifies individuals to test for the National Professional Qualification (NPQ) Inspector Level-I examination.

#### FRSC 1161 – Fire Service Safety and Loss Control

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*Prerequisite:* Program Admission. This course will provide the necessary knowledge and skills for the emergency responder to understand occupational safety and health and be able to develop safety programs. The course starts with an introduction to occupational safety and health and covers the history, national agencies that produce injury and fatality reports, and efforts that have been made to address safety and health problems in emergency service occupations. The course will review safety related regulations and standards and discuss how to implement them through risk management processes. There will be lectures and discussions on pre-incident safety, safety at fire emergencies, safety at medical and rescue emergencies, safety at specialized incidents, and post-incident safety management. Personnel roles and responsibilities will be covered, so that knowledge can be gained on the relationship to the overall safety and health program by the different responding and administrative personnel at emergency scenes. Lectures and discussions on how to develop, manage, and evaluate safety programs. Finally information management and various other special topics will be covered to gain knowledge on the legal, ethical, and financial considerations that programs need to be aware of and how to collect the data and report it.

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### FRSC 2100 – Fire Administration Management

Prerequisite: Program admission. This course will provide the necessary knowledge and skills for the emergency responder to become a diverse leader and manager in their department. The course starts with the history of the fire service which focuses on the historical events that have forged the fire service today. Discussions on preparing for the future are designed to provide information to develop a game plan for personal success. Leadership and Management principles will be taught to blend the academics of leadership and management research into what occurs in the fire service organization on a daily basis. Leadership styles will be discussed to help understand how to lead and manage and, as important, why its done. The course will take an insightful look into how people handle change personally and organizationally. Discussions on ethics will be focused on the elements critical to ethical leadership and management practices. The course will explore the elements of team building and provide a depth of understanding how to blend various styles and personalities to get the most from people. Discussions on managing emergency services will target budgeting and personnel management the support elements that are so vital to every organization. Quality of the fire service will also be looked at for methods of quality improvement and their applications to improve the services delivered to citizens everyday. An in-depth overview of the changes in disaster planning and response since 9-11, and includes ways to help with community evaluation and preparedness processes. Finally, shaping the future will explore the possibilities of what may occur in the fire service and how you can play an important role in helping to shape the fire service of the future.

### FRSC 2110 - Fire Service Hydraulics

Prerequisite: Program Admission. This course begins with the history and theories of the use of water for fire extinguishment then moves to practical application of the principles of hydraulics in water systems and on the fire ground. Topics include: water at rest and in motion, velocity and discharge, water distribution systems, fire service pumps, friction loss, engine and nozzle pressures, fire streams, standpipe systems, automatic sprinkler systems, firefighting foams, and the clip board friction loss system.

#### FRSC 2120 – Fire Protection Systems

Prerequisite: Program admission. A review of fire detection and protection systems including: automatic sprinkler systems, portable fire extinguishers, restaurant/kitchen systems, special hazard systems, detection systems, and control systems. The applicable laws, codes and standards will be introduced along with regulatory and support agencies. Specific topics include: introduction to fire protection systems, water supply systems for fire protection systems, water-based suppression systems, nonwater-based suppression systems, fire alarm systems, smoke management systems, and portable fire extinguishers.

#### FRSC 2130 - Fire Service Building Construction

Prerequisite: Program Admission. Presents building construction features from the perspective of the fire service with emphasis placed on the use of building construction information to prevent and reduce fire fighter and civilian deaths and injuries. Topics include: principles of building construction, building construction classification, building construction hazards and tactical considerations, structural loads and stresses, structural building components and functions, fire resistance and flame spread, building codes, structural failure and firefighter safety, and firefighter safety in structural and wildland firefighting.

#### FRSC 2141 – Incident Command

Prerequisite: Program Admission. The Incident Command course is designed to illustrate the responsibilities to use, deploy, implement, and/or function within an Incident Command System (ICS) as well as functioning within multi-jurisdictions incident under the Incident Management System (IMS). The course emphasizes the need for incident management systems, an overview of the structure and expandable nature of ICS, an understanding of the command skills needed by departmental officers to use ICS guidelines effectively, and scenario practice on how to apply ICS and IMS. The National Incident Management System (NIMS) will illustrate and provide the consistent nationwide template to enable all government, private-sectors, and nongovernmental organizations to work together during virtual all domestic incidents. These course competencies will cover those objectives entailed in NIMS 100, 200, 700, and 800.

#### FRSC 2170 – Fire and Arson Investigation

Prerequisite: Program Admission. Presents an introduction to Fire Investigation. Emphasis is placed upon: fire behavior, combustion properties of various materials, sources of ignition, and investigative techniques for - structures, grassland, wildland, automobiles, vehicles, ships and other types of fire investigation, causes of electrical fires, chemical fires, explosive evaluations, laboratory operation, Techniquest used in fire deaths and injuries, arson as a crime, other techniques, State and Federal laws, and future trends in fire investigative technology.

### HIMT 1100 - Introduction to Health Information Technology

Prerequisite: Program Admission. This course focuses on orienting the student to health information management. Topics include introducing students to the structure of healthcare in the United States and its providers, and the structure and function of the American Health Information Management Association (AHIMA).

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#### HIMT 1150 - Computer Applications in Healthcare

Prerequisite: COMP 1000. Designed to provide students with computer and software skills used in medical offices. Topics include hardware and software components of computers for medical record applications; database software and information management; specialized information management systems in healthcare; methods of controlling confidentiality and patient rights; accuracy and security of health information data in computer systems as well as future directions of information technology in healthcare.

#### HIMT 1200 - Legal Aspects of Healthcare

Prerequisite: Program Admission. This course focuses on the study of legal principles applicable to health information, patient care and health records. Topics include: working of the American Legal System, courts and legal procedures, principles of liability, patient record requirements, access to health information, confidentiality and informed consent, the judicial process of health information, specialized patient records, risk management and quality assurance, HIV information, and the electronic health record.

#### HIMT 1250 - Health Record Content and Structure

This course provides a study of content, storage, retrieval, control, retention, and maintenance of health information. Topics include: health data structure, content and standards, healthcare information requirements and standards.

#### HIMT 1350 - Pharmacotherapy

Prerequisite: BUSN 2300 or ALHS 1090. Introduces drug therapy with emphasis on safety, classification of drugs, their action, side effects, and/or adverse reactions. Also introduces the basic concept used in the administration of drugs. Topics include: introduction to pharmacology, sources and forms of drugs, drug classification, and drug effects on the body systems.

#### HIMT 1400 - Coding and Classification I - ICD Coding

Prerequisite: BIOL 2114 or ALHS 1011; ALHS 1090 or BUSN 2300; HIMT 1350. Corequisite: MAST 1120. This course provides the student an introduction to Medical Coding & Classification of diseases, injuries, encounters, and procedures using standard applications of Medical Coding Guidelines to support reimbursement of healthcare services.

#### HIMT 1410 - Coding and Classification II - ICD Advanced Coding

This course is a continuation of HIT 1400 (Coding and Classification I). This course provides the student with case studies for in-depth review of inpatient and outpatient record formats as found in current healthcare settings. Advanced coding skills and use of industry applications to apply coding and billing standards will be the focus to develop auditing and compliance strategies in the work setting.

#### HIMT 2150 - Healthcare Statistics

Prerequisite: MATH 1111. Corequisite: HIMT 2200 This course analyzes the study of methods and formulas used in computing and preparing statistical reports for health care services and vital records. It also focuses on the study of methods and techniques used in presenting statistical data.

#### HIMT 2200 - Performance Improvement

This course introduces the students to the peer review and the role health information plays in evaluating patient care. The course investigates the components of performance improvement programs in health care facilities, including quality assessment, utilization management, risk management, and critical clinical pathways. State and local standards are included as well as review of the federal governments role in health care and accreditation requirements of various agencies.

#### HIMT 2300 - Healthcare Management

This course will engage in the functions of a manager, planning, organizing, decision making, staffing, leading or directing, communication and motivating. Further study will include principles of authority/ responsibility, delegation and effective communication, organization charts, job descriptions, policies and procedures, employee motivation, discipline and performance evaluation.

#### HIMT 2400 - Coding and Classification System III - CPT/HCPCS Coding

Prerequisite: HIMT 1400. This course provides an introduction to, and application of, codes using CPT/HCPCS system. Codes will be applied to workbook exercises, case studies, and actual outpatient charts. Codes will be assigned manually as well as by an encoder.

#### HIMT 2410 - Revenue Cycle Management

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Prerequisite: HIMT 1400. This course focuses on how the revenue cycle is impacted by various departments within the facility such as patient access/registration, case management/guality review, health information management, and patient accounting. Subjects include insurance plans, medical necessity, claims processing, accounts receivable, chargemaster, DRGs, APCs, edits, auditing and review. ICD and CPT coding as they relate to the billing function will be reviewed. The importance of revenue cycle management for fiscal stability is emphasized.

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### HIMT 2460 - Health Information Technology Practicum

Prerequisites: HIMT 1200; HIMT 1250. Corequisite: HIMT 2400. This course will allow students to perform advanced functions of a health information management (HIM) department. Students will work in realistic work environments in either a traditional, non-traditional, or lab setting. Activities will include application of all HIMT coursework. The student will also learn professional skills to prepare them for employment in the HIM career field.

### HIMT 2500 - Certification Seminar

This course provides students with the opportunity to review for the certification exam. Students are also afforded the opportunity to develop a portfolio as they seek to make the transition into the workforce. Topics include: searching the job market; preparing the portfolio; stress management and burnout; test-taking strategies; and reviewing for the certification exam.

### HIST 1111 World History I

Prerequisites: Appropriate Degree Level Writing (English) and Reading Placement Test Scores. Emphasizes the study of intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from the prehistoric era to early modern times. Topics include the Prehistoric Era the Ancient Near East, Ancient India, Ancient China, Ancient Rome, Ancient Africa, Islam, the Americas, Japan, Ancient Greece, the Middle Ages, and the Renaissance.

#### HIST 1112 – World History II

Prerequisites: Appropriate Degree Level Writing (English) and Reading Placement Test Scores. Emphasizes the study of the intellectual, cultural, scientific, political, and social contributions of the civilizations of the world and the evolution of these civilizations during the period from early modern times to the present. Topics include transitions to the Modern World, scientific revolution and the Enlightenment, political modernization, economic modernization, imperialism, and the Twentieth Century.

#### HIST 2111 – U.S. History I.

Prerequisites: Appropriate Degree Level Writing (English) and Reading Placement Test Scores. Emphasizes the study of U. S. History to 1877 to include the post-Civil War period. The course focuses on the period from the Age of Discovery through the Civil War to include geographical, intellectual, political, economic and cultural development of the American people. It includes the history of Georgia and its constitutional development. Topics include colonization and expansion; the Revolutionary Era; the New Nation; nationalism, sectionalism, and reform; the Era of Expansion; and crisis, Civil War, and reconstruction.

### HIST 2112 – U.S. History II

Prerequisites: Appropriate Degree Level Writing (English) and Reading Placement Test Scores. Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution. Topics include the Reconstruction Period; the great West, the new South, and the rise of the debtor; the Gilded Age; the progressive movement; the emergence of the U. S. in world affairs; the Roaring Twenties; the Great Depression; World War II; the Cold War and the 1950's; the 1960's and 1970's; and America since 1980.

#### HORT 1000 - Horticulture Science

*Prerequisite:* Provisional admission. Introduces the fundamentals of plant science and horticulture as a career field. Emphasis will be placed on an industry overview; plant morphology; plant physiology; environmental factors affecting horticulture practices; soil physical and chemical properties; fertilizer elements and analysis; and basic propagation techniques.

#### **HORT 1010 - Woody Ornamental Plant Identification**

*Prerequisite:* Program admission. Provides the basis for a fundamental understanding of the taxonomy, identification, and culture requirements of woody plants. Topics include: introduction to woody plants, classification of woody plants, and woody plant identification and culture requirements.

#### **HORT 1020 - Herbaceous Plant Identification**

*Prerequisite:* Program admission. Emphasizes the identification, selection, and cultural requirements of herbaceous plants. Topics include: introduction to herbaceous plants, plant classification and nomenclature of herbaceous plants, herbaceous plant identification and culture requirements and seasonal color management.

#### HORT 1030 - Greenhouse Management

*Prerequisite:* Provisional admission. This course helps to prepare students for a career in the management of commercial greenhouses, conservatories and institutional greenhouses. Emphasis is placed on greenhouse construction; operation and management; regulating and controlling the environment; applying cultural practices as they affect plant physiological processes and influence plant growth and development; and management of a greenhouse business.

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#### **HORT 1040 - Landscape Installation**

#### This course helps develop skills needed to prepare an area for plant and vital non-plant materials as well as install the landscape items as intended by the designer. Topics include: Workplace safety, retaining wall construction, landscape paving, irrigation and drainage, plant installation, and managerial functions related to landscape installation.

#### **HORT 1050 - Nursery Production and Management**

#### Prerequisite: Provisional admission. Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: industry overview, facility design, propagation techniques and environment, field grown and container production, and managerial functions for nursery production.

#### HORT 1060 - Landscape Design

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plans for residential/commercial clients. Topics include: landscape design principles, sketching and drawing skills, site analysis, plant and material selection, and landscape design process.

#### HORT 1080 - Pest Management

Prerequisite: Provisional admission. This course provides an introduction to the principles and mechanisms of integrated pest management across a diverse array of pests including insects, weeds, plant pathogens, nematodes and vertebrates. Specifically, the course will provide students with a fundamental and practical understanding of integrated pest management in a landscape setting with emphasis on pest identification and control; pesticide application safety; and legal requirements for state licensure.

#### HORT 1120 - Landscape Management

This course introduces cultural techniques required for proper landscape management with emphasis on practical application and managerial techniques. Topics include: landscape management, safe operation and maintenance of landscape equipment, and administrative functions for landscape managers.

#### HORT 1140 - Horticulture Business Management

Prerequisite: Provisional admission. This course presents managerial techniques required for business success in a chosen horticultural field. All aspects of establishing and managing a small business will be addressed. Emphasis will be placed on strategic planning; financial management; marketing strategies; human resource management; and operations and administration.

#### HORT 1150 - Environmental Horticulture Internship

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved in on-the-job environmental horticulture applications that require practice and follow through. Topics include: work ethics, skills, and attitudes; demands of the horticulture industry; horticultural business management; and labor supervision.

### HORT 1160 - Landscape Contracting

Provides essential knowledge and skills in landscape contracting with emphasis on landscape business practices and principles, landscape bidding and estimating and managerial skills for the landscape business environment. Topics include: overview of landscape industry, landscape business principles and practices, landscape bidding and estimating and managerial skills for the landscape business environment.

#### **HORT 1200 - Arboriculture Science**

Introduces the fundamentals of tree management, establishment and assessment as a career field in the urban forestry environment. Topics include: tree structure and function, tree identification and selection, installation and establishment, tree management, trees and construction and tree worker safety.

#### HORT 1310 - Irrigation

Provides students with exposure to the basic principles of hydraulics and fluidics. Special attention is given to watering plant materials in various soil and climatic conditions through the use of irrigation. Topics include: industry overview; fluidics and hydraulics; system design and installation.

#### HORT 1330 - Turfgrass Management

Prerequisite: Provisional admission. A study of turfgrass used in the southern United States. Topics include: industry overview, soil and soil modification; soil fertility; turf installation; turf maintenance, turf diseases, insects and weeds: and estimating costs on management practices.

#### HORT 1410 - Soils

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## fundamentals of soil science including: soil formation and classification; physical, chemical and biological characteristics; soil fertility and productivity; and soil management and conservation practices.

### HORT 1420 - Golf Course Design Construction and Management

Prerequisite: Provisional admission. Introduces basic golf course design principles as well as construction and renovation activities and basic golf course maintenance practices. Topics include: introduction and history, golf course design principles, golf course construction and golf course maintenance.

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Prerequisite: Program admission. Corequisite: HORT 1000. This course introduces students to the basic

#### HORT 1430 - Advanced Landscape Design

This course familiarizes students with approaches to garden and small outdoor space design. Students will examine various approaches to color and design theory relevant to designing gardens and outdoor spaces. Topics include history of design, landscape design principles and elements, sketching and drawing skills, design analysis, garden design styles, plant material selection and the development of a garden planting plan.

### HORT 1440 - Landscape Grading and Drainage

Allows students to become familiar with basic site grading procedures that promote proper site drainage. This course emphasizes a hands-on approach to grading using hand and machine-driven equipment. Topics include: overview of grading and drainage, topographic map reading and evaluation, basic surveying procedures and equipment usage, site analysis and drainage design and installation, grading equipment operation and safety and grading landscape areas.

#### HORT 1500 - Small Gas Engine Repair and Maintenance

Prerequisite: Program admission. Provides instruction in basic small engine maintenance. Topics include: engine types; ignition systems; fuel systems; lubrication, filtration, and maintenance; and engine repair.

#### HORT 1560 - Computer-Aided Landscape Design

Introduces computer aided landscape design techniques and used in landscape design projects. Emphasis is placed on practical application of landscape design processes through use of computer applications. Topics include: software commands; scale and layers operations; and drawing and design.

#### HORT 1680 - Woody Plant Identification II

Prerequisite: Provisional admission. Students will develop a systematic approach to proper classification, nomenclature, identification, culture and use of many different woody plant species suitable for the region. Topics include: principles of plant classification and nomenclature, identification traits of woody plants and identification, culture and use of woody landscape plant species.

#### HORT 1690 - Horticulture Spanish

An introduction to the Spanish language and Latino culture as applied to green industry managers. Topics include: introductory conversational Spanish with an emphasis on green industry vocabulary in the areas of Spanish verbs, nouns and grammar and understanding and appreciating aspects of Latino culture for more effective management.

#### HORT 1700 - Large Equipment Operation

Prerequisite: Program admission. This course will allow students to gain significant experience in the safe operation of horticulture equipment. Students will gain experience in the operation of tractors and attachments, skid-steer equipment, trenchers, landscape maintenance equipment and any other equipment relevant to the landscape industry. The course will combine lectures, demonstrations and lab activities on equipment use, operation and safety in the field.

### HORT 1720 - Introductory Floral Design

Prerequisite: Program admission. This course introduces the basic concepts and practices of floral design. Topics include: introduction to floral design; principles and elements of design used in floral compositions; identification of commonly used floral materials; conditioning and storing cut flowers; mechanics and supplies of flower arranging; construction of basic geometric designs; and corsage construction.

#### HORT 1730 - Advanced Floral Design

Prerequisite: HORT 1720. Advanced floral design theory; techniques and skills which enhances students' ability to design with cut and dried floral materials with emphasis on party, wedding, sympathy and highstyle floral designs.

#### HORT 1750 - Interiorscaping

Develops the skills involved in designing, installing, and maintaining interior plantings. Topics include: industry overview, environmental requirements, maintenance practices, plant disorders, design, and installation.

#### HORT 1800 - Urban Landscape Issues

This course introduces the concepts and principles of sustainable urban landscapes. By using these concepts the student will be able to create outdoor spaces that are not only functional and maintainable, but environmentally sound, cost effective and aesthetically pleasing. The design process is the first consideration, followed by implementation and maintenance, each with sustainability as a major consideration. The course will cover such topics as green roofs, water wise principles, rain gardens, pervious paving, LEED, erosion and sedimentation control and others.

#### HORT 2249 - Flower Shop Management

Prerequisite: Provisional admission. Introduces the student to the development and operational procedures of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: overview of the floral industry and starting a floral business.

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#### **HORT 2500 - Specialty Landscape Construction**

#### This course is designed to introduce construction methods, materials, and safety procedures related to the design and installation of specialty landscape features such as water features, lighting, and garden structures.

### HUMN 1101 – Introduction to Humanities

#### Prerequisite: ENGL 1101. Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, and literature. The humanities provide insight into people and society. Topics include historical and cultural developments, contributions of the humanities, and research.

## ICET 2040 - Fundamentals of Pressure, Temperature, Flow, and Level

Prerequisite: IDSY 1230. An introduction to the concepts of pressure, level, flow, and temperature calculations and conversions; operating principles of indicators, recorders, transmitters, and transducers. Measure pressure, level, flow, and temperature using various indicators and recorders. Develop troubleshooting techniques for various devices.

## **ICET 2060 - Instrumentation Maintenance and Calibration**

*Prerequisite:* ICET 2040. This course introduces methodology into maintenance procedures for various process control systems that will include preventive and predictive methodologies. This course also provides an in-depth study of calibration theory, procedures, and techniques using diverse associated test equipment.

### **ICET 2080 - Final Control Elements**

#### Prerequisite: IDSY 2800. This course includes principles of operation, calibration, servicing, troubleshooting, repair and replacement of actuators/control valves.

### **IDFC 1000 - Principles of Electricity I**

Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

## **IDFC 1005 - Principles of Electricity II**

This course introduces the theory and application of varying sine wave voltages and current and solid state devices. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, basic transformers, an introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices.

### **IDFC 1007 - Industrial Safety Procedures**

Prerequisite: Provisional admission. Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial, and home electrically operated equipment. Topics include: introduction to OSHA regulations; safety tools, equipment, and procedures; and first aid and cardiopulmonary resuscitation.

## **IDFC 1011 - Direct Current I**

Corequisite: MATH 1012. 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.

### IDFC 1012 - Alternating Current I

Corequisite: IDFC 1011. 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.

## **IDSY 1011 - Industrial Computer Applications**

Prerequisite: COMP 1000; IDFC 1011. Provides a foundation in industrial computers and computer systems with a focus in linking computers to the plant floor process. Topics include: hardware, software, boot sequence, configuration, troubleshooting, and communication platforms.

## IDSY 1020 - Print Reading and Problem Solving

Introduces practical problem solving techniques as practiced in an industrial setting. Topics include: analytical problem solving, troubleshooting techniques, reading blueprints and technical diagrams, schematics and symbols, specifications and tolerances. The course emphasizes how the machine or mechanical system works, reading engineering specifications and applying a systematic approach to solving the problem.

## **IDSY 1100 - Basic Circuit Analysis**

Corequisite: MATH 1013. This course introduces direct current concepts and applications, alternating current theory and application of varying sine wave voltages and current, and the physical characteristics and applications of solid state devices. Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination circuits, inductance and capacitance, diodes and amplifiers, and semiconductor fundamentals.

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# **IDSY 1110 - Industrial Motor Controls I**

This course introduces the fundamental concepts, principles, and devices involved in industrial motor controls, theories and applications of single and three-phase motors, wiring motor control circuits, and magnetic starters and braking. Topics include, but are not limited to, motor theory and operating principles, control devices, symbols and schematic diagrams, NEMA standards, Article 430 NEC and preventative maintenance and troubleshooting.

## **IDSY 1120 - Basic Industrial PLC's**

Corequisite: IDSY 1110. This course introduces the operational theory, systems terminology, PLC installation, and programming procedures for Programmable Logic Controllers. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

## **IDSY 1130 - Industrial Wiring**

Corequisite: IDSY 1100. Teaches the fundamental concepts of industrial wiring with an emphasis on installation procedures. Topics include: grounding, raceways, three-phase systems, transformers (three-phase and single-phase), wire sizing, overcurrent protection, NEC requirements, industrial lighting systems, and switches, receptacles, and cord connectors.

## IDSY 1150 - DC and AC Motors

Prerequisites: IDFC 1011; IDFC 1012. Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory and operating principles, motor terminology, motor identification, NEMA standards, AC motors, DC motors, scheduled preventive maintenance, and troubleshooting and failure analysis.

## **IDSY 1160 - Mechanical Laws and Principles**

Introduces the student to fundamental laws and principles of mechanics. Topics include: Mechanical Principles of Simple Machines; Force, Torque, Velocity, Acceleration, and Inertia; Rotational Motion; Work, Power, and Energy; Matter; Gases; Fluid Power; and Heat. The course emphasizes understanding terminology and using related problem solving skills in everyday physical applications of mechanical technology. Competencies are reinforced with practical hands on lab exercises.

## **IDSY 1170 - Industrial Mechanics**

This course introduces and emphasizes the basic skill necessary for mechanical maintenance personnel. Instruction is also provided in the basic physics concepts applicable to the mechanics of industrial production equipment, and the application of mechanical principles with additional emphasis on power transmission and specific mechanical components.

# **IDSY 1180 - Magnetic Starters and Braking**

Corequisite: IDSY 1150. Provides instruction in wiring motor control circuits. Emphasis is placed on designing and installing magnetic starters in across-the-line, reversing, jogging circuits, and motor braking. Topics include: control transformers, full voltage starters, reversing circuits, jogging circuits, and braking.

## IDSY 1190 - Fluid Power and Piping Systems

This course provides instruction in the fundamentals of safely operating hydraulic, pneumatic, and pump and piping systems. Theory and practical application concepts are discussed. Topics include hydraulic system principles and components, pneumatic system principles and components, and the installation, maintenance, and troubleshooting of pump and piping systems.

## **IDSY 1210 - Industrial Motor Controls II**

*Corequisite*: IDSY 1110. This course introduces the theory and practical application for two-wire control circuits, advanced motor controls, and variable speed motor controls. Emphasis is placed on circuit sequencing, switching, and installation, maintenance, and troubleshooting techniques.

# **IDSY 1220 - Intermediate Industrial PLC's**

Corequisite: IDSY 1120. This course provides for hands on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated equipment. Topics include data manipulation, math instructions, introduction to HMI, analog control, and troubleshooting discrete IO devices.

# **IDSY 1230 - Industrial Instrumentation**

Provides instruction in the principles and practices of instrumentation for industrial process control systems with an emphasis on industrial maintenance techniques for production equipment. Topics include: instrument tags; process documentation; basic control theory; sensing pressure, flow, level, and temperature; instrument calibration; and loop tuning.

# IDSY 1240 - Maintenance for Reliability

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Prerequisite: IDSY 1170. Applies advanced instrumentation in conjunction with principles of mechanical physics, vibration and particulate analysis, thermography, and advanced reliability concepts relative to precision/ predictive maintenance of industrial equipment.

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#### **IDSY 1260 - Machine Tool for Industrial Repairs**

Provides Industrial Mechanics the basic machine shop skills to perform common mechanical repairs such as: repair of scored pump shafts, motor shafts, conveyor shafts or valve stems; repair or fabrication of support brackets; fabrication of simple shaped (cylindrical or rectangular) parts; making or repairing keyseats and keys.

### IDSY 2700 - Advanced PLC's I

Prerequisite: IDSY 1220. Corequisites: IDSY 2730; IDSY 2750. Provides for hands-on development of operational skills in Programming/Troubleshooting industrial control systems and automated industrial equipment. Emphasis is placed on applying skills developed in previous courses in programmable logic controls (PLCs) in an industrial setting. This course includes advanced skills & techniques the students can apply to actual control applications in an industrial environment.

### IDSY 2730 - Advanced PLC's II

Corequisites: IDSY 2700; IDSY 2750. Provides hands-on development of operational skills in Programming and set-up for industrial control and process systems. Emphasis is placed on logically thinking through a system process and applying the skills taught in previous PLC classes to solve complex control issues. This course places emphasis on analog controls and advanced process control.

### **IDSY 2750 - Human Machine Interface**

Corequisites; IDSY 2700; IDSY 2730. Provides hand-on development of Programming skills for industrial HMI components used automated industrial systems. Emphasis is placed on applying skills developed in previous courses in programmable logic controls (PLCs) in an industrial setting. This course includes advanced skills and techniques the student can apply to HMI applications in an industrial environment.

### **IDSY 2800 - Advanced Process Control**

Prerequisite: IDSY 2750. Teaches advanced process control skills to include Process control drawings, PID control, advanced loops and tuning, Process controllers, DCS systems, and SCADA systems. The student will be introduced to the fundamentals, devices and methods use in todays advanced process systems.

### **IDSY 2830 - Networking Industrial Equipment**

Corequisites: IDSY 2800; IDSY 2850. Provides communication and networking skills needed for cabling and connection to PLC/HMI Devices.

#### **IDSY 2850 - Industrial Graphical Communication**

Corequisites: IDSY 2800; IDSY 2830. Provides hands on experience in the development and implementation of graphical computer based HMI (Human-Machine Interfaces) for control of automated machines and industrial manufacturing systems. This course is built on the users knowledge/familiarity of programmable logic controls (PLCs) and demonstrates the capabilities and economic impact of PC based controls systems. The manufacturing industry's demand for low cost automated solutions has pushed the desktop PC into the plant floor. Areas such as front end creation, I/O assignments and communications, alarming, and acknowledgement, data trending and more are covered and explored throughout the course.

#### LETA 1010 - Health & Life Safety for Basic Law Enforcement

Prerequisite: Program admission. Introduces students of the Basic Law Enforcement Academy to emergency care or first aid, cardiopulmonary resuscitation, universal precautions, interpersonal communications, as well as concepts related to mental health, mental retardation and substance abuse. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1012 - Ethics and Liability for Basic Law Enforcement

Prerequisite: Program admission; LETA 1032. This course for students of the Basic Law Enforcement Academy examines the ethical issues and areas of liability confronted by law enforcement personnel. Included in this course are the following topics: ethics and professionalism, peace officer liability. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1014 - Firearms Training for Basic Law Enforcement

Prerequisite: Program admission; LETA 1010; LETA 1012: LETA 1018; LETA 1024; LETA 1026; LETA 1032. This course provides the student of the Basic Law Enforcement Academy with an understanding of terminology, legal requirements, liability, safety considerations, tactics, procedures, firearms nomenclature, fundamentals of marksmanship, fundamental simulation in the use of deadly force and the opportunity to demonstrate proficiency in marksmanship. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

### LETA 1016 - Emergency Vehicle Operations for Basic Law Enforcement

Prerequisite: Program admission; LETA 1010; LETA 1024; LETA 1026; LETA 1030; LETA 1032. This course provides the student of the Basic Law Enforcement Academy with an understanding of appropriate driving actions, terminology, local responsibility, specific statutes, and safety considerations as well as demonstrate proficiency in the operation of an emergency vehicle. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

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#### LETA 1018 - Defensive Tactics for Basic Law Enforcement

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*Prerequisite:* Program admission; LETA 1010; LETA 1024; LETA 1026; LETA 1032. This course provides students of the Basic Law Enforcement Academy with an understanding of terminology, human anatomy, legal requirements, liability, safety, tactics, and demonstrate proper procedures for specific techniques to search, control and restrain a person. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1020 - Police Patrol Operations for Basic Law Enforcement

*Prerequisite:* Program admission; LETA 1010; LETA 1024; LETA 1026; LETA 1030; LETA 1032. This course presents the knowledge and skills associated with police patrol operations. Emphasis is placed on patrol techniques, crimes in progress, crisis intervention, domestic disputes, Georgia Crime Information Center procedures, electronics communications and police reports. Topics include: foundations, policing skills and communication skills. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

### LETA 1022 - Methods of Criminal Investigation for Basic Law Enforcement 4

*Prerequisite:* Program admission; LETA 1010; LETA 1024; LETA 1026; LETA 1030; LETA 1032. This course presents the fundamentals of criminal investigation. The duties and responsibilities of the investigator both in field and in the courtroom are highlighted. Emphasis is placed on techniques commonly utilized by investigative personnel as well as the procedures used for investigating various crimes. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1024 - Criminal Law for Criminal Justice for Basic Law Enforcement 4

*Prerequisite:* Program admission; LETA 1032. This course introduces criminal law in the United States, but emphasizes the current specific status of Georgia criminal law. The course will focus on the most current statutory contents of the Official Code of Georgia Annotated (O.C.G.A.) with primary emphasis on the criminal and traffic codes. Topics include: historic development of criminal law in the United States; statutory law, Georgia Code (O.C.G.A.) Title 16 - Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 16 - Crimes and Offenses; statutory law, Georgia Code (O.C.G.A.) Title 40 - Motor Vehicle and Traffic Offenses; and Supreme Court rulings that apply to criminal law. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

### LETA 1026 - Criminal Procedure for Basic Law Enforcement

*Prerequisite:* Program admission; LETA 1024; LETA 1032. Introduces the procedural law of the criminal justice system which governs the series of proceedings through which government enforces substantive criminal law. The course offers an emphasis on the laws of arrest and search and seizure; the rules of evidence, right to counsel, and the rights and duties of both citizens and officers. The course covers in depth appropriate Case Law and court rulings that dictate criminal procedure on the State and Federal Level. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of credit.

### LETA 1028 - Police Traffic Control and Investigation for Basic Law Enforcement

*Prerequisite:* Program admission; LETA 1010; LETA 1024; LETA 1026; LETA 1030; LETA 1032. This course examines enforcement of traffic laws and procedures for traffic accident investigation. Emphasis is placed on Georgia traffic laws, traffic law enforcement, recognition of impaired driving, and traffic accident investigation. Topics include: regulations, impaired driving, and traffic accident investigation. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1030 - Principles of Law Enforcement for Basic Law Enforcement 3

*Prerequisite:* Program admission; LETA 1024; LETA 1026; LETA 1032. This course examines the principles of the organization, administration, and duties of federal, state and local law enforcement agencies. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1032 - Introduction to Criminal Justice for Basic Law Enforcement

*Prerequisite:* Program admission. Introduces the development and organization of the criminal justice system in the United States. Topics include: the American criminal justice system; constitutional limitations; organization of enforcement, adjudication, and corrections; and career opportunities and requirements. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

#### LETA 1034 Constitutional Law for Criminal Justice for Basic Law Enforcement

*Prerequisite:* Program admission; LETA 1024; LETA 1026; LETA 1032. This course emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government; principles governing the operation of the U.S. Constitution, the Bill of Rights and the Fourteenth Amendment. This course is limited to students enrolled in the Basic Law Enforcement Technical Certificate of Credit.

### MAST 1010 - Legal and Ethical Concerns in the Medical Office

Prerequisite: Program admission. Introduces the basic concept of medical assisting and its relationship to the other health fields. Emphasizes medical ethics, legal aspects of medicine, and the medical assistant's role as an agent of the physician. Provides the student with knowledge of medical jurisprudence and the essentials of professional behavior. Topics include: introduction to medical assisting; introduction to medical law; physician/patient/assistant relationship; medical office in litigation; as well as ethics, bioethical issues and HIPAA.

### MAST 1030 – Pharmacology in the Medical Office

*Prerequisite:* Program admission, MATH 1012. Introduces medication therapy with emphasis on safety; classification of medications; their actions; side effects; medication and food interactions and adverse reactions. Also introduces basic methods of arithmetic used in the administration of medications. Topics include: introductory pharmacology; dosage calculation; sources and forms of medications; medication classification; and medication effects on the body systems.

### MAST 1060 – Medical Office Procedures

Prerequisite: Program admission. Emphasizes essential skills required for the medical practice. Topics include: office protocol, time management, appointment scheduling, medical office equipment, medical references, mail services, medical records, and professional communication.

#### MAST 1080 - Medical Assisting Skills I

Prerequisite: Program Admission, ALHS 1011 or ALHS 1090. Introduces the skills necessary for assisting the physician with a complete history and physical in all types of medical practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include: infection control and related OSHA guidelines; prepare patients/assist physician with age and gender-specific examinations and diagnostic procedures; vital signs/mensuration; medical office surgical procedures and electrocardiography.

### MAST 1090 - Medical Assisting Skills II

Prerequisite: Program Admission; ALHS 1011; and ALHS 1090. Furthers student knowledge of the more complex activities in a physician's office. Topics include: collection/examination of specimens and CLIA regulations/risk management; urinalysis; venipuncture; hematology and chemistry evaluations; advanced reagent testing (Strep Test, HcG etc); administration of medications; medical office emergency procedures and emergency preparedness; respiratory evaluations; principles of IV administration; rehabilitative therapy procedures; principles of radiology safety and maintenance of medication and immunization records.

#### MAST 1100 - Medical Insurance Management

Prerequisite: Program Admission: ALHS 1011: ALHS 1090: BUSN 1100: COMP 1000; and ENGL 1010. Emphasizes essential skills required for the medical practice. Topics include: managed care, reimbursement, and coding.

### MAST 1110 - Administrative Practice Management

Prerequisite: Program Admission; ALHS 1011; ALHS 1090; BUSN 1100; COMP 1000; and ENGL 1010. Emphasizes essential skills required for the medical practice in the areas of computers and medical transcription. Topics include: medical transcription/electronic health records; application of computer skills; integration of medical terminology; accounting procedures; and application of software.

### MAST 1120 - Human Pathological Conditions in the Medical Office

Prerequisite: Program admission. Provides fundamental information concerning common diseases and disorders of each body system. For each system, the disease or disorder is highlighted including: description, etiology, signs and symptoms, diagnostic procedures, treatment, management, prognosis, and prevention. Topics include: introduction to disease and diseases of body systems.

### MAST 1170 - Medical Assisting Externship

Prerequisite: Program admission. Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills and functioning in the work environment.

#### MAST 1180 - Medical Assisting Seminar

Prerequisite: Program admission. 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.

#### MAST 1510 - Medical Billing and Coding I

Prerequisites: ALHS 1011; ALHS 1090; ENGL 1010. Provides an introduction to medical billing and coding skills with applications of international coding standards for billing of health care services. Topics include: International Classification of Diseases, code book formats, guidelines and conventions, and coding techniques.

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### MAST 1520 - Medical Billing and Coding II

*Prerequisite:* MAST 1510. Corequisite: MAST 1530. Continues development of skills and knowledge presented in MAST 1510: Medical Billing and Coding I and provides for patient disease and medical procedure coding for billing purposes by health care facilities. Topics include: medical records coding techniques; coding linkage and compliance; third-party reimbursement issues; and ethics in coding including fraud and abuse.

### MAST 1530 - Medical Procedural Coding

*Prerequisite:* MAST 1510. Provides the knowledge and skills to apply the coding of procedures for billing purposes using the Physicians Current Procedural Terminology (CPT) manual. Topics include: format of CPT manual, CPT manual coding guidelines, and coding using the CPT manual.

### MATH 0096 - Math I

*Prerequisite:* Appropriate Arithmetic Placement Test Score. Teaches the student basic arithmetic skills needed for the study of mathematics related to specific occupational programs. Topics include number theory, whole numbers, fractions, and decimals. Homework assignments reinforce classroom learning.

#### MATH 0097 - Math II

*Prerequisite:* Appropriate Arithmetic Placement Test Score or MATH 0096. 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.

### MATH 0098 - Elementary Algebra

*Prerequisite:* Appropriate Arithmetic Placement Test Score or MATH 0097. Emphasizes basic algebra skills. Topics include introduction to real numbers and algebraic expressions, solving linear equations, graphs of linear equations, polynomial operations, and polynomial factoring.

### MATH 0099 - Intermediate Algebra

*Prerequisite:* Appropriate Arithmetic Placement Test Score or MATH 0098. Emphasizes intermediate algebra skills. Topics include factoring, inequalities, rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

### MATH 1011 – Business Math

*Prerequisite:* Appropriate Arithmetic Placement Test Score or MATH 0097. 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.

#### **MATH 1012 – Foundations of Mathematics**

*Prerequisite:* Appropriate arithmetic placement test score or MATH 0097. Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics.

#### MATH 1013 – Algebraic Concepts

*Prerequisite:* Appropriate Algebra Placement Test Score or MATH 0098. Emphasizes concepts and operations which are applied to the study of algebra. Topics include basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts.

#### MATH 1015 - Geometry and Trigonometry

*Prerequisite:* MATH 1013. Emphasizes basic geometric and trigonometric concepts. Topics include measurement conversion, geometric terminology and measurements, and trigonometric terminology and functions.

#### MATH 1017 - Trigonometry

*Prerequisite:* MATH 1013. Emphasizes trigonometric concepts, logarithms, and exponential functions. Topics include trigonometric concepts, logarithms and exponentials.

#### MATH 1100 – Quantitative Skills and Reasoning

*Prerequisite:* Program Admission; Appropriate Algebra Placement Test Score. Emphasizes algebra, statistics, and mathematics of finance. Topics include fundamental operations of algebra, sets and logic, probability and statistics, geometry, mathematics of voting and districting, and mathematics of finance.

### MATH 1101 – Mathematical Modeling

*requisite:* Program Admission AND Minimum COMPASS score of 42 (or COMPASS equivalent) OR Completion of Math 0099 with a minimum exit COMPASS score of 42 (or COMPASS equivalent). Emphasizes functions using real-world applications as models. Topics include fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models; systems of equations; and optional topics in algebra.

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### MATH 1111 - College Algebra

requisites: Program Admission and Minimum COMPASS score of 42 (or COMPASS equivalent); or Completion of MATH 0099 with a minimum exit COMPASS Score of 42 (or COMPASS equivalent). Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

### MATH 1112 – College Trigonometry

Prerequisite: Program admission; MATH 1111. Emphasizes techniques of problem solving using trigonometric concepts. Topics include trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions and graphing of trigonometric functions, logarithmic and exponential functions, and complex numbers.

### MATH 1113 – Precalculus

Prerequisite: Program admission; MATH 1111. Prepares students for calculus. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay.

### MATH 1127 – Introduction to Statistics

Prerequisite: Program admission level math achievement. Emphasizes the concepts and methods fundamental to utilizing and interpreting commonly used statistics. Topics include descriptive statistics, basic probability, discrete and continuous distributions, sampling distributions, hypothesis testing chi square tests, and linear regression.

#### MCHT 1011 - Introduction to Machine Tool

Prerequisite: Provisional admission. Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include: machine shop safety, terminology, use of hand and bench tools, analysis of measurements, part layout, horizontal and vertical band saw setup and operation, drill press setup and operation, and quality control.

### MCHT 1012 - Blueprint for Machine Tool

Prerequisite: Provisional admission. Introduces the fundamental concepts necessary to develop blueprint reading competencies, interpret drawings, and produce sketches for machine tool applications. Topics include interpretation of blueprints, sketching, sectioning, geometric dimensioning and tolerancing, and assembly drawings.

### MCHT 1013 - Machine Tool Math

Prerequisites: Provisional admission; MATH 1012. This course develops mathematical competencies as applied to machine tool technology. Emphasis is placed on the use of machining formulas by incorporating algebraic, geometric, and trigonometric functions. Topics include machining algebra and geometry, applied geometry, and applied trigonometry.

#### MCHT 1015 - Surface Grinder Operations

#### 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, surface grinder operations, and safety.

### MCHT 1017 - Characteristics of Metals/Heat Treatment I

#### Prerequisite: Provisional admission. Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include: heat treatment safety, metallurgy principles and heat treatment of metals.

### MCHT 1119 - Lathe Operations I

Prerequisites: Provisional admission; MATH 1012; MATH 1111; MCHT 1011; MCHT 1013. Provides opportunities for students to develop skill in the setup and operation of metal cutting lathes. Topics include: safety, lathes parts and controls, lathe tooling and tool bit grinding, lathe calculations, lathe setup and operations.

### MCHT 1120 - Mill Operations I

#### Prerequisites: Provisional admission; MATH 1012; MATH 1111; MCHT 1011; MCHT 1013. Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations.

### MCHT 1219 - Lathe Operations II

Prerequisites: Provisional admission; MCHT 1119. Provides further instruction for students to develop skill in the use of lathes. Topics include: lathes, lathe setup, lathe operations, and safety.

## MCHT 1220 - Mill Operations II

Prerequisites: MCHT 1120. Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculation, advanced milling machine setup and operations.

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## MGMT 1100 - Principles of Management

Prerequisite: Provisional admission. Develops skills and behaviors necessary for successful supervision of people and their job responsibilities. Emphasis will be placed on real life concepts, personal skill development, applied knowledge and managing human resources. Course content is intended to help managers and supervisors deal with a dramatically changing workplace being affected by technology changes, a more competitive and global market place, corporate restructuring and the changing nature of work and the workforce. Topics include: Understanding the Managers Job and Work Environment; Building an Effective Organizational Culture; Leading, Directing, and the Application of Authority; Planning, Decision-Making, and Problem-Solving; Human Resource Management, Administrative Management, Organizing, and Controlling.

#### MGMT 1105 - Organizational Behavior

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.

#### MGMT 1110 - Employment Law

Prerequisite: Provisional admission. Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, Alternative Dispute Resolution (ADR), Discrimination Law, Selecting Applicants Under the Law, OSHA and Safety, Affirmative Action, At-Will Doctrine, Right to Privacy, Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA), Workers Compensation, Unemployment Compensation, and National Labor Relations Act.

#### MGMT 1115 - Leadership

*Prerequisite:* Provisional admission. This course familiarizes the student with the principles and techniques of sound leadership practices. Topics include: Characteristics of Effective Leadership Styles, History of Leadership, Leadership Models, The Relationship of Power and Leadership, Team Leadership, The Role of Leadership in Effecting Change.

### MGMT 1120 - Introduction to Business

Prerequisite: Provisional admission. This course is designed to provide the student with an overview of the functions of business in the market system. The student will gain an understanding of the numerous decisions that must be made by managers and owners of businesses. Topics include: the market system, the role of supply and demand, financial management, legal issues in business, employee relations, ethics, and marketing,

#### MGMT 1125 - Business Ethics

Prereauisite: Provisional admission. Provides students with an overview of business ethics and ethical management practices with emphasis on the process of ethical decision-making and working through contemporary ethical dilemmas faced by business organizations, managers and employees. The course is intended to demonstrate to the students how ethics can be integrated into strategic business decisions and can be applied to their own careers. The course uses a case study approach to encourage the student in developing analytical, problem-solving, critical thinking and decision-making skills. Topics include: An overview of business ethics; moral development and moral reasoning; personal values, rights, and responsibilities; frameworks for ethical decision-making in business; justice and economic distribution; corporations and social responsibility; corporate codes of ethics and effective ethics programs; business and society: consumers and the environment; ethical issues in the workplace; business ethics in a global and multicultural environment; business ethics in cyberspace; and business ethics and the rule of law.

#### MGMT 1135 - Managerial Accounting and Finance

Prerequisite: Program admission. The focus of this course is to acquire the skills and concepts necessary to use accounting information in managerial decision making. Course is designed for those who will use, not necessarily prepare, accounting information. Those applications include the use of information for short and long term planning, operational control, investment decisions, cost and pricing products and services. An overview of financial accounting and basic concepts of finance provides an overview of financial statement analysis.

#### MGMT 2115 - Human Resource Management

Prerequisite: Provisional admission. This course is designed as an overview of the Human Resource Management (HRM) function and of the manager and supervisors role in managing the career cycle from organizational entry to exit. It acquaints the student with the authority, responsibility, functions, and problems of the human resource manager, with an emphasis on developing familiarity with the real world applications required of employers and managers who increasingly are in partnership with HRM generalists and specialists in their organizations. Topics include: strategic human resource management, contemporary issues in HRM: ethics, diversity and globalization; the human resource/supervisor partnership; human resource planning and productivity; job description analysis, development, and design: recruiting, interviewing, and selecting employees; performance management and appraisal systems; employee training and development; disciplinary action and employee rights; employee compensation and benefits; labor relations and employment law; and technology applications in HRM.

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### MGMT 2120 - Labor Management Relations

Prerequisite: Provisional admission. Provides a student with an overview of the relationship of rank and file employees to management in business organizations. The nature of the workplace, the economic foundations of work organizations, and the history of the relationship between management and labor is examined. The course acquaints the student with the principles of developing positive relationships between management and labor within the context of the legal environment governing labor relations. Topics include: the nature of the American workplace; the economic history of business organizations, the historical roots of labormanagement relations; adversarial and cooperative approaches to labor relations; the legal framework of labor relations; employee-employer rights; collective bargaining and union organizing processes; union and nonunion grievance procedures; international labor relations; and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations.

#### MGMT 2125 - Performance Management

Prerequisite: Provisional admission. Develops an understanding of how fostering employer/employee relationships in the work setting improves work performance. Develops legal counseling and disciplinary techniques to use in various workplace situations. . Topics include: the definitions of coaching, counseling, and discipline; importance of the coaching relationship; implementation of an effective counseling strategy; techniques of effective discipline; and performance evaluation techniques.

#### MGMT 2130 - Employee Training and Development

Prerequisite: Provisional admission. Addresses the challenges of improving the performance and career potential of employees, while benefiting the student in their own preparation for success in the workplace. The focus is on both training and career and personal development. Shows the student how to recognize when training and development is needed and how to plan, design, and deliver an effective program of training for employees. Opportunities are provided for the student to develop their own career plans, assess their workrelated skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication.

#### MGMT 2135 - Management Communication Techniques

Prerequisite: Provisional admission. Corequisite: COMP 1000. Emphasizes developing the full range of communication strategies required to become a successful manager and prepares managers for the skills required to communicate effectively in business today. Topics include: Organizational/Strategic Communication, Interpersonal Communication, Presentation Techniques, Presentation Technology & Applications, Team/Group Communication, Intercultural Communication, External Stakeholder Communication and Using Spreadsheet Applications for Business Problem Solving.

#### MGMT 2140 - Retail Management

Prerequisite: Provisional admission. Develops a working knowledge of managing a retail business from a variety of perspectives with an emphasis on store management. The emphasis is on contemporary issues in retailing, particularly the process of supervising customer service and dealing with the changing demographics of retailing. An application focus on the use of information technologies, the internet, and electronic retailing is intended to give the student hands-on experience in retail management. Topics include: strategic retail management; store, non-store, and nontraditional retailing; retail human resource management; developing a customer-focused service strategy; managing customer service; retail operations and financial management; merchandise management; buying and inventory management; global, cataloging, and electronic retail management, information technology applications in retailing.

### MGMT 2145 - Business Plan Development

Prerequisite: Provisional admission. Provides students with knowledge and skills necessary for a manager or entrepreneur to develop and implement a business plan. Topics include: business/community compatibility, introduction to cash flow and break even analysis, development of product/service idea, determination of market feasibility, determination of financial feasibility, development of marketing strategy, development of operations outline, and application of financial concepts.

#### MGMT 2150 - Small Business Management

Prerequisite: Provisional admission. This course introduces the essentials of starting, managing, and growing a small business. Topics include: the role of the entrepreneur, pricing, advertising, financing, and layout of facilities, inventory control, staffing, purchasing, vendor selection, and relevant laws affecting small business.

#### MGMT 2155 - Quality Management Principles

Prerequisite: Provisional admission. Familiarizes the student with the principles and methods of Quality Management (QM). Topics include: the history of quality control, quality control leaders, quality tools, QM implementation, team building for QM, and future quality trends.

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### MGMT 2200 - Production/Operations Management

Prerequisite: Program admission. This course provides the student with an intensive study of the overall field of production/operations management. Topics include: role of production management/production managers, operational design, capacity planning, aggregate planning, inventory management, project management, and quality control/assurance.

### MGMT 2205 - Service Sector Management

This course focuses on supervision in the service sector with special emphasis on team building, quality management, and developing a customer focus. The challenge of providing world-class customer service is addressed through sections on principles of service industry supervision, career development, problem solving, stress management, and conflict resolution. Topics include: principles of service industry supervision, team building, customer service operations, TQM in a service environment, business software applications, communication in the service sector, introduction to information systems, selling principles and sales management, retail management, and legal issues in the service sector.

### MGMT 2210 - Project Management

Prerequisite: Provisional admission. Provides a basic understanding of project management functions and processes. Topics include: team selection and management; project planning, definition and scheduling of tasks; resource negotiation, allocation, and leveling; project control, monitoring, and reporting; computer tools for project planning and scheduling; managing complex relationships between project team and other organizations; critical path methodology; and total quality management.

### MGMT 2215 - Team Project

Prerequisite: Program admission. This course utilizes team methodologies to study the field of management. It encourages students to discuss their perception of management practices which have been studied during the management program. Topics include: current issues and problems in management and supervision and state-of-the-art management and leadership techniques. Students will be put into teams, will work on team projects to demonstrate their understanding of the competencies of this course, and will do peer evaluation. Potential team projects could include authoring a management book covering the competencies, videos, web sites, bulletin boards, and slide presentations amongst others.

### MGMT 2220 - Management Occupation-Based Instructions

Prerequisite: Program admission. Corequisites: ENGL 1010; MGMT 1100. Reinforcement of management, supervision, and employability principles in an actual job placement or through a practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into management and supervisory applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of management and supervisory techniques, and professional development. The occupation-based instruction is implemented through the use of a practicum or internship and all of the following: written individualized training plans, written performance evaluation, and a required weekly seminar.

### MKTG 1100 - Principles of Marketing

This course emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include effective communication in a marketing environment, role of marketing, knowledge of marketing principles, marketing strategy, and marketing career paths.

#### MKTG 1130 - Business Regulations and Compliance

This course introduces the study of contracts and other legal issues and obligations for businesses. Topics include: creation and evolution of laws, court decision processes, legal business structures, sales contracts, commercial papers, Uniform Commercial Code, and risk-bearing devices.

#### MKTG 1160 - Professional Selling

This course introduces professional selling skills and processes. Topics include: professional selling, product/ sales knowledge, customer analysis/relations, selling process, sales presentations, and ethics of selling.

#### MKTG 1161 - Service Industry Business Environment

This course introduces the learner to the service industry. Topics include: an introduction to the service industry business environment, an introduction to life-long learning, work ethic and positive behavior required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles.

#### MKTG 1162 - Customer Contact Skills

This course provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include: skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer-Based Training (CBT) is used to allow students to practice skills using simulated business situations.

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#### MKTG 1163 - Computer Skills for Customer Service

Provides students with th fundamentals of computer skills used in a customer service environment. Topics include: introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases and introduction to E-mail.

#### MKTG 1164 - Business Skills for the Customer

Provides students with the fundamentals of basic business skills used in the customer service environment. Topics include: introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tolls for team problem-solving and service improvement.

#### MKTG 1165 - Personal Effectiveness in Customer Service

Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include: personal wellness and stress management, positive image, and job interview skills.

#### MKTG 1190 - Integrated Marketing Communication

This course introduces the fundamental principles and practices associated with promotion and communication. Topics include: purposes of promotion and IMC, principles of promotion and Integrated Marketing Communication (IMC), budgeting, regulations and controls, media evaluation and target market selection, integrated marketing plans, trends in promotion, and promotion and communication career paths.

#### MKTG 1210 - Services Marketing

This course introduces the marketing skills required in a service business. Topics include: foundation of services marketing, managing service delivery/encounters, services marketing strategy, and aligning strategy service design, and standards.

#### MKTG 1270 - Visual Merchandising

This course focuses on the components of the visual merchandising of goods and services. Topics include: design and color principles, tools and materials of the trade, lighting and signs, installation of displays, store planning, safety, and related areas of visual merchandising and display.

#### **MKTG 1280 - Introduction to Sports and Recreation Management**

This course introduces the sociological, philosophical, economic, and historical aspects of the sports and recreation industry. Topics include: nature of sports and recreation management, sports management landscape, research and trends, programming in sports and recreation management, employee training, evaluation and relations, fiscal topics in the business of sports and recreation, and careers in sports and recreation management.

#### MKTG 1370 - Consumer Behavior

This course analyzes consumer behavior and applicable marketing strategies. Topics include: the nature of consumer behavior, influences on consumer behavior, consumer decision-making process, role of research in understanding consumer behavior, and marketing strategies.

#### MKTG 2000 - International Marketing

Prerequisite: MKTG 1100. This course introduces opportunities and international strategies employed in the global marketplace. Topics include: the environment of international marketing, analyze international marketing opportunities, international market entries, design an international marketing strategy, and career paths in international marketing.

#### MKTG 2010 - Small Business Management This course introduces competencies required in managing a small business. Topics include: nature of small

## MKTG 2060 - Marketing Channels

Emphasizes the design and management of marketing channels. Topics include: role of marketing channels, channel design and planning, supply chain management, logistics, and managing marketing channels.

#### MKTG 2070 - Buying and Merchandising

# dising, inventory control, merchandise plan, assortment planning, buying merchandise, and pricing strategies. MKTG 2080 - Regulations and Compliance in Sports

relations, financial planning, and business assessment and growth.

#### This course introduces the legal principles involved in sports. Topics include: nature of sports law, sports law and change, sports law environment, court decision processes, and sports contracts.

#### MKTG 2090 - Marketing Research

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Prerequisite: MKTG 1100. This course conveys marketing research methodology. Topics include: role of marketing research, marketing research process, ethics in marketing research, research design, collection data analysis, reporting, application of marketing research, and marketing research career paths.

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# 3 business management, business management and organizational change, marketing strategies, employee

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# Develops buying and merchandising skills required in retail or e-business. Topics include: principles of merchan-

### MKTG 2160 - Advanced Selling

Prerequisite: MKTG 1160. This course emphasizes advanced sales presentation skills needed in professional selling. Topics include: managing effective customer relationships, self-management, sales force training. sales force development, and career paths in professional selling.

### MKTG 2180 - Principles of Sports Marketing

This course applies the principles of marketing utilized in the sports industry. Topics include: nature of sports marketing, role of sports marketing, marketing principles specific to sports, marketing mix to achieve goals, and electronic landscape and media in sports.

#### MKTG 2210 - Entrepreneurship

Prerequisite: Provisional admission. This course provides an overview of the steps in establishing a business. A formal business will be created. Topics include planning, location analysis, financing, developing a business plan, and entrepreneurial ethics and social responsibility.

#### MKTG 2270 - Retail Operations Management

Prerequisite: Provisional admission. This course emphasizes the planning, staffing, leading, organizing, and controlling management functions in a retail operation. Topics include: the retailing environment, retailing strategy, supply chain management, financial planning, financial strategies, employee relations, and career paths in retailing.

### MKTG 2280 - Sports Management

Prerequisite: MKTG 1280. This course emphasizes leadership and management in the sports marketing industry. Topics include: leadership, budgeting, project management, event management, contract negotiation, and international sports marketing.

### MKTG 2290 - Marketing Internship/Practicum

Prerequisite: Program instructor approval. This course applies and reinforces marketing and employability skills in an actual job placement or practicum experience. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing skills, and professional development

#### MKTG 2300 - Marketing Management

Prerequisite: MKTG 1100 and program instructor approval. This course reiterates the program outcomes for marketing management through the development of a marketing plan. Topics include: the marketing framework, the marketing plan, and preparing a marketing plan for a new product.

### MUSC 1101 – Music Appreciation

Explores the analysis of well-known works of music, their compositions, and the relationship to their periods. An introduction to locating, acquiring, and documenting information resources lays the foundation for research to include the creative and critical process, the themes of music, the formal elements of composition, and the placing of music in the historical context. Topics include historical and cultural development represented in musical arts.

#### NAST 1100 - Nurse Aide Fundamentals

Prereauisite: Program admission. Introduces student to the role and responsibilities of the Nurse Aide. Emphasis is placed on understanding and developing critical thinking skills, as well as demonstrating knowledge of the location and function of human body systems and common disease processes; responding to and reporting changes in a residents /patients condition, nutrition, vital signs; nutrition and diet therapy; disease processes; vital signs; observing, reporting and documenting changes in a residents condition; emergency concerns; ethics and legal issues and governmental agencies that influence the care of the elderly in long term care settings; mental health and psychosocial well-being of the elderly; use and care of mechanical devices and equipment; communication and interpersonal skills and skills competency based on federal guidelines. Specific topics include: roles and responsibilities of the Nurse Aide; communication and interpersonal skills; topography, structure, and function of the body systems; injury prevention and emergency preparedness; residents rights; basic patient care skills; personal care skills; and restorative care.

#### NEUT 1000 - Musculoskeletal Anatomy and Physiology

Prerequisite: Program admission. Corequisites: NEUT 1020; NEUT 1030; NEUT 1050; NEUT 1060. The purpose of this course is to provide an advanced understanding of musculoskeletal anatomy so as to enable the student to better assess and treat client conditions. Topics include: bones; joints; terminology; and muscles by region.

#### **NEUT 1010 - Neuro Science**

Prerequisite: NEUT 1000; NEUT 1030; NEUT 1050; NEUT 1060. Corequisites: NEUT 1080; NEUT 1090. This course provides an understanding of nervous system to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function: communication of the neural and endocrine systems; and NMT Foundational Platform.

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### NEUT 1020 - Pathology for the Neuromuscular Therapist

Prerequisite: Program admission. Corequisite: NEUT 1060. This course prepares students to identify general pathological conditions so as to be able to refer for medical attention or identify indications and contraindications for massage for specific body systems as stated: musculoskeletal, endocrine, nervous, integumentary, circulatory and lymphatic, respiratory, gastrointestinal, urinary, and reproductive systems. Topics include: review of basic anatomy and physiology per body system; identification of pathologic conditions per body system; physiologic effects of manual therapies upon each body system; formation of a treatment plan; indications versus contraindications for treatment; dysfunction versus disease; and critical reading.

#### **NEUT 1030 - Neuromuscular Therapy Fundamentals**

Prerequisite: Program admission. Corequisites: NEUT 1000; NEUT 1050. Provides student with knowledge and practice of basic skills necessary for maintaining a successful and responsible career as a Neuromuscular therapist. This course prepares students in practical application for clinic by developing the proper skills necessary for interviewing clients, collecting data, assessment of data collection, developing patient care plan, and proper documentation. Topics include: history of massage and body work; professionalism, effective communication skills; documentation and charting; formation of a treatment plan utilizing assessment procedures; and critical reading.

#### NEUT 1050 - Technique and Theory I

Prerequisite: Program admission. Corequisites: NEUT 1000; NEUT 1030. This course lays the foundation for other neuromuscular courses as it provides the essential basic skills for soft tissue manipulations. Students will learn how to incorporate the basic Swedish strokes as well as integrate each body region into a full body treatment session. Topics include: therapeutic environment; client positioning, bolstering, and draping; endangerment sites; Swedish strokes per NCE; integrated routine; mobile practice; and self care.

#### NEUT 1060 - Clinic I

Prerequisites: NEUT 1030; NEUT 1050. Corequisites: NEUT 1000; NEUT 1020. Students begin clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients; document assessment findings; discern indications and contraindications; develop and implement proper treatment plans; and deliver and evaluate effective Swedish and Deep tissue sessions for a minimum of three clients per week. Student will continue to utilize wellness essentials, evaluate client/ therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation; effective communication skills; effective treatment; preceptor shadowing; case study; community outreach; and self care.

### **NEUT 1080 - Technique and Theory II**

Prerequisites: NEUT 1010; NEUT 1020; NEUT 1030; NEUT 1050; NEUT 1060. Corequisites: NEUT 1010; NEUT 1090. This course enhances didactic instruction of students in the techniques of neuromuscular therapy (NMT) as related to physiologic factors of pain such as Ischemia, Trigger Points, Postural Distortion, Neural Compression/Entrapment, Biomechanical Dysfunction, Nutrition and Stress in an attempt to restore and maintain a balance among the muscular, skeletal and nervous systems. Topics include: NMT foundational platform; NMT application fundamentals; indications and contraindications for treatment; muscles; NMT treatment per body region; and self care.

#### **NEUT 1090 - Adjunctive Modalities**

Prerequisites: NEUT 1000; NEUT 1020; NEUT 1030; NEUT 1050; NEUT 1060. Corequisite: NEUT 1120. This course provides practical application of adjunctive therapies to accompany NMT treatment in student clinic. Topics include: advanced assessment techniques; muscle lengthening techniques; thermotherapy; passive and active engagement; positional release techniques; and critical reading.

#### **NEUT 1100 - Progressive Modalities**

Prerequisites: NEUT 1000; NEUT 1020; NEUT 1030; NEUT 1050; NEUT 1060. Corequisites: NEUT 1110; NEUT 1230. This course is intended to be an overview of other adjunctive modalities. Further supervised study and training in these modalities is necessary for responsible therapy. Topics include: myofascial release overview; pregnancy massage; and lymphatic drainage.

#### **NEUT 1110 - Licensure Review**

Prerequisites: NEUT 1000; NEUT 1010; NEUT 1020; NEUT 1030; NEUT 1050; NEUT 1060; NEUT 1080; NEUT 1090; NEUT 1120. Corequisites: NEUT 1100; NEUT 1230. This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) or an equivalent licensure exam approved by the Therapist's chosen state of practice. Students will be self directed in review of competencies of NCBTMB or other chosen licensing exam. Also, students will participate in simulated registry exams. Review topics include: anatomy, physiology, and kinesiology; massage application and assessment; pathology; professional ethics and business practices; clinical reasoning; and Eastern modalities.

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### NEUT 1120 - Clinic II

*Prerequisites:* NEUT 1060; NEUT 1080. *Corequisite:* NEUT 1090. Students will continue clinical reasoning and provide supervised therapy services in the college clinic. Students will apply skills learned in previous courses to interview clients, document assessment findings, discern indications and contraindications, develop and implement proper treatment plans, and deliver and evaluate effective treatment plan sessions for a minimum of three clients per week utilizing combined therapies of NMT routines, Swedish, and deep tissue. Student will continue to utilize wellness essentials, evaluate client/therapist communication, and improve professional work ethic. This course also includes a community service component. Topics include: documentation, advanced communication skills, effective treatment, preceptor shadowing, community outreach and self care.

### **NEUT 1230 - Professional Leadership for Neuromuscular Therapist**

*Prerequisite:* NEUT 1080. *Corequisites:* NEUT 1110. This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are professional ethics and standards for practice per chosen professional massage therapy organization Topics include: networking; business promotion; business management; start-up plan portfolio; financial management; State (Georgia) law; Local Law; and Professional Ethics.

#### **OCTA 1010 - Introduction to Occupational Therapy**

*Prerequisite:* Program admission. *Corequisite:* OCTA 1020. Explains the philosophy and history of occupational therapy and its relationship to other health care providers. Topics include: foundations, history, and philosophical base of the profession and its personnel; role of OTA within health care team role of OTA within various practice sites; definition of OT; introduction to AOTA code of ethics and standards of practice; introduction to OT theories, models of practice, and frames of reference; introduction to the OT Practice Framework Domain and Process; and role delineation.

### OCTA 1020 - Growth and Development

*Prerequisites:* Program admission; ALHS 1090 or BUSN 2310. *Corequisites:* OCTA 1010; OCTA 1030; OCTA 1040. Introduces the range of responses and reactions to human growth, and the activities to enhance body function. Topics include: normal growth and development patterns across life span, and occupational therapy principles which emphasize the use of purposeful activities and occupations to promote health and prevent disease.

#### **OCTA 1030 - Developmental Tasks**

*Prerequisite:* Program admission. *Corequisite:* OCTA 1020. Studies human tasks and activities across the developmental life span. Through learning and teaching occupations, students will utilize therapeutic self, group and dyadic interaction to analyze, grade and adapt purposeful activities and occupations to foster occupational performance within each stage of life. Topics include: activity analysis of daily living work and play/ leisure, performance and teaching of selected life, tasks and activities, therapeutic use of self, introduction to group and dyadic interaction, OT practice framework domain and process, grading and adapting purposeful activity (occupational) for therapeutic interaction.

#### **OCTA 1040 - Conditions in Occupational Therapy**

*Prerequisites:* BIOL 2114; BIOL 2114L; ALHS 1090. *Corequisites:* OCTA 1010; OCTA 1020; OCTA 1030. Overview of the etiology, clinical course, prognosis, and prevention of disease processes and traumatic injuries. Includes problems associated with individuals and family who have difficulty with social cultural expectations. Emphasis is on the effect of such conditions on occupational performance and ways to promote health. Topics include: introduction to disease processes, diseases and traumatic injuries of body systems, occupational performance problems related to various socio-cultural environments, promotion of health prevention of injury and disease for quality of life and well being.

#### **OCTA 1050 Analysis of Human Movement**

*Prerequisites:* BIOL 2114; BIOL 2114L; ALHS 1090. *Corequisite*: OCTA 1010. Introduces the phenomenon of human motion within the context of occupational performance. Topics include: introduction to movement, principles of gravity and basic biomechanics and their effect on movement, survey of the skeletal system, articular system, nervous system, and muscular system, and analysis of movement while performing functional activities.

### **OCTA 2010 - Psychosocial Dysfunction**

*Prerequisites:* All OCTA 1000 level courses; PSYC 2250. *Corequisite*: OCTA 2020. Studies occupational therapy to service recipients for the prevention or remediation of psychosocial dysfunction or maintenance of mental health. Introduces the psychiatric disorders in different stages of human life. Encompasses OT concepts and principles in psychosocial dysfunctions which emphasize purposeful activity and role function. Topics include: psychosocial conditions commonly referred to occupational therapy; screening, evaluation, and standardized procedures for psychosocial OT; participation in the development of the OT intervention termination; and psychosocial dysfunction treatment intervention documentation procedure.

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#### **OCTA 2020 - Psychosocial Dysfunction Treatment Methods**

Prerequisites: PSYC 2250; All OCTA 1000 level courses. Corequisite: OCTA 2010. Focuses on intervention of the psychiatric disorders occurring in different stages of human life through practical methods. Topics include: assistance with data collection which includes administering standardized and nonstandardized tests, contribution to the formation of OT goals and objectives on evaluation, use of self and dyadic and group interaction, and provision of the therapeutic intervention related to occupational performance areas in psychosocial dysfunction.

#### **OCTA 2040 – Pediatric Issues**

Prerequisites: All OCTA 1000 level courses. Covers childhood to early adulthood occupational therapy related issues, including developmental disabilities. Topics include: service delivery models, OT practice framework domain process, pediatric conditions commonly referred to OT, therapeutic intervention with the pediatric population. Emphasizes the important of patient, family/significant other/caregiver education and documentation to ensure reimbursement in today's healthcare environment.

### **OCTA 2060 – Physical Dysfunction**

Prerequisites: All OCTA 1000 level courses. Corequisite: OCTA 2070. Studies occupational therapy to service recipients for the prevention or remediation of physical dysfunction or maintenance of quality of life. Introduces physical dysfunction in different stages of human life. Encompasses OT concepts and principles in physical dysfunctions which emphasize purposeful activity and role function. Topics include: physical conditions commonly referred to occupational therapy; screening, evaluation, and standardized procedures for physical dysfunction intervention; participation in the development of the OT intervention plan; collaboration with OTR on intervention, implementation, reevaluation and intervention termination; and physical dysfunction intervention documentation procedure. Focuses on OT intervention and evaluation principles through practical applications. Topics include: assistance with data collection and documentation which includes administering standardized and nonstandardized tests and assessment tools appropriate to the role of OTA in the practice area of physical dysfunction, contribution to the formation of OT goals and objectives on evaluation, use of self and dyadic and group interaction, and provision of the therapeutic intervention elated to occupational performance areas in physical dysfunction.

#### **OCTA 2070 – Physical Dysfunction Treatment Methods**

Prerequisites: All OCTA 1000 level courses. Corequisite: OCTA 2060. Focuses on OT intervention and evaluation principles through practical applications. Topics include: assistance with data collection which includes administering standardized and nonstandardized tests, contribution to the formation of OT goals and objectives on evaluation, use of self and dyadic and group interaction, and provision of the therapeutic intervention related to occupational performance areas in physical dysfunction.

#### **OCTA 2090 – Geriatric Issues**

Prerequisites: All OCTA 1000 level courses. Covers occupational therapy related geriatric issues. Topics include: Service delivery models, OT practice framework domain and process, geriatric conditions commonly referred to OT, therapeutic intervention with the geriatric population. Emphasizes the importance of patient, family/significant other/caregiver education and documentation to ensure reimbursement in today's healthcare environment.

### **OCTA 2120 – Occupational Therapy Trends and Issues**

Prerequisites: All OCTA 1000 level courses; OTCA 2010, OCTA 2020. Teaches the roles and responsibilities in the administration of occupational therapy services. Topics include: assistance with the management of departmental operations; development of values, attitudes, and behaviors congruent with OT standards and ethics; the role of OTA in occupational therapy, research publication, and program evaluation; supervisory requirements; certification and licensure; reimbursement issues; personnel training and supervision; continued learning; and promotion of the Occupational Therapy profession; and job search skills. Resources for the life long learning and professional support are provided and promoted; including job finding skills such as interviewing and negotiation Preparation for the national certification examination is provided as well as preparation for Level II fieldwork.

#### **OCTA 2130 – Therapeutic Adaptations**

Prerequisites: All OCTA 1000 level courses. Occupational Therapy issues that promote human quality of life are addressed through class, demonstration, and practical activities. Topics include: applications of therapeutic adaptation for accomplishing purposeful activities including family training, community programming, basic orthotics and prosthetics, assistive devices, equipment, and other OT technologies utilization of safety procedures; and assistance with planning and implementation of group and individual programs to promote health, function, and quality of life.

#### OCTA 2210 – Level II Fieldwork - A

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Prereauisites: All OCTA 1000 level courses: OCTA 2010: OCTA 2020: OCTA 2040: OCTA 2060: OCTA 2070: OCTA 2090; OCTA 2120; OCTA 2130. Provides the opportunity to practice occupational therapy for eight weeks in a supervised health care facility. Topics include: application of learned skills through presentation of a case study and/or special project, and supervised clinical applications of principles learned in the curriculum and appropriate to the learning needs of the student.

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### OCTA 2220 – Level II Fieldwork - B

*Prerequisites:* All OCTA 1000 level courses; OCTA 2010; OCTA 2020; OCTA 2040; OCTA 2060; OCTA 2070; OCTA 2090; OCTA 2120; OCTA 2130; OCTA 2210. Provides the opportunity to practice occupational therapy for eight weeks in a supervised health care facility. Topics include: application of learned skills through presentation of a case study and/or special project, and supervised clinical applications of principles learned in the curriculum and appropriate to the learning needs of the student.

#### **PHAR 1000 - Pharmaceutical Calculations**

This course develops knowledge and skills in pharmaceutical calculations procedures. Topics include: systems of measurement, medication dispensing calculations, pharmacy mathematical procedures, and calculation tools and techniques.

### PHAR 1010 - Pharmacy Technology Fundamentals

*Prerequisite:* Provisional Admission. Provides an overview of the pharmacy technology field and develops the fundamental concepts and principles necessary for successful participation in the pharmacy field. Topics include: safety, orientation to the pharmacy technology field, Fundamental principles of chemistry, basic laws of chemistry, ethics and laws, definitions and terms, and reference sources.

#### **PHAR 1020 - Principles of Dispensing Medications**

*Prerequisite:* PHAR 1000. *Corequisite:* PHAR 1050. This course introduces the student to principles of receiving, storing, and dispensing medications. Topics include: purchasing, packaging, and labeling drugs; pharmacy policies and procedures; documentation; inventory and filing systems; compounding; storage and control; pharmacy equipment; and health care organizational structure. This course provides laboratory and clinical practice.

#### **PHAR 1030 - Principles of Sterile Medication Preparation**

*Prerequisites:* PHAR 1000, PHAR 1010. *Corequisites:* PHAR 1020; PHAR 1050. Continues the development of student knowledge and skills in preparing medication, processing glassware, and maintaining an aseptic environment. Topics include: aseptic and sterile techniques, parenteral admixtures, hyperalimentation, chemotherapy, filtering, disinfecting, contamination, ophthalmic preparations, infection control, and quality control.

#### PHAR 1040 - Pharmacology

The course introduces the students to principles and knowledge about all classifications of medication. Topics include: disease states and treatment modalities, pharmaceutical side effects and drug interactions, control substances, specific drugs, and drug addiction and abuse.

#### PHAR 1050 - Pharmacy Technology Practicum

*Prerequisites:* PHAR 1010, PHAR 1020. *Corequisite:* PHAR 1030. Orients students to the clinical environment and provides experiences with the basic skills necessary for the pharmacy technician. Topics include: storage and control, documentation, inventory and billing, community practice, institutional practice, and communication.

#### PHAR 1055 - Pharmacy Assistant Practicum

*Prerequisites:* ALHS 1011; ALHS 1090; MATH 1012; PHAR 1000, PHAR 1010, PHAR 1020. This course orients students to the clinical environment and provides experiences with the basic skills necessary for the pharmacy assistant. Topics include: purchasing, packaging and labeling drugs; distribution systems; pharmacy policies and procedures; documentation; inventory and filing systems; compounding; contamination control; storage and control; pharmacy equipment, and health care organizational structures.

#### PHAR 2060 - Advanced Pharmacy Technology Principles

*Prerequisites:* PHAR 1030, PHAR 1050, COMP 1000. *Corequisite:* PHAR 2070. This course presents the advanced concepts and principles needed in the pharmacy technology field. Topics include: physician orders, patient profiles, pharmacy data systems, job readiness, legal requirements, inventory and billing, pharmaceutical calculations review and pharmacology review.

### PHAR 2070 - Advanced Pharmacy Technology Practicum

*Prerequisites:* PHAR 1030, PHAR 1050, COMP 1000. *Corequisite:* PHAR 2060. Continues the development of student knowledge and skills applicable to pharmacy technology practice. Topics include: dispensing responsibilities, physician orders, controlled substances, hyperalimentation, chemotherapy, patient profiles, pharmacy data systems, ophthalmic preparations, and hospital/retail/home health pharmacy techniques.

#### PHLT 1030 - Introduction to Venipuncture

*Prerequisites:* ENGL 1010; ALHS 1011; ALHS 1090. *Corequisites:* ALHS 1040; COMP 1000. Provides an introduction to blood collecting techniques and processing specimens. Emphasis is placed on the knowledge and skills needed to collect all types of blood samples from hospitalized patients. Topics include: venipuncture procedure, safety and quality assurance; isolation techniques, venipuncture problems, and definitions; lab test profiles and patient care areas; other specimen collections and specimen processing; test combinations, skin punctures and POCT; professional ethics and malpractice; and certification and licensure.

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### **PHLT 1050 - Clinical Practice**

*Prerequisites:* ALHS 1040; COMP 1000; PHLT 1030. Provides work experiences in a clinical setting. Emphasis is placed on enhancing skills in venipuncture techniques. Topics include: introduction to clinical policies and procedures and work ethics; routine collections: adult, pediatric, and newborn; and special procedures.

### **PHYS 1110 - Conceptual Physics**

*Prerequisites:* ENGL 1101; MATH 1101 or MATH 1111. *Corequisite:* PHYS 1110L.This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Introduces some of the basic laws of physics. Topics include systems of units and conversion of units, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

#### PHYS 1110L - Conceptual Physics Lab

*Prerequisites:* ENGL 1101; MATH 1101 or MATH 1111. *Corequisite:* PHYS 1110. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Selected laboratory exercises paralleling the topics in PHYS 1110. The laboratory exercises for this course include systems of units and systems of measurement, vector algebra, Newtonian mechanics, fluids and thermodynamics, heat, light, and optics, mechanical waves, electricity and magnetism, and modern physics.

### **PHYS 1111 - Introductory Physics I**

*Prerequisites:* ENGL 1101; MATH 1112 or MATH 1113. *Corequisite:* PHYS 1111L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. The first course of two algebra and trigonometry based courses in the physics sequence. Topics include material from mechanics (kinematics, dynamics, work and energy, momentum and collisions, rotational motion, static equilibrium, elasticity theory, and simple harmonic motion), mechanical waves, theory of heat and heat transfer, and thermodynamics.

#### PHYS 1111L - Introductory Physics Lab I

*Prerequisites:* ENGL 1101; MATH 1112 or MATH 1113. *Corequisite:* PHYS 1111. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both.Selected laboratory exercises paralleling the topics in PHYS 1111. The laboratory exercises for this course include units of measurement, Newton's laws, work energy and power, momentum and collisions, one- and two-dimensional motion, circular motion and law of gravity, rotational dynamics and static equilibrium, elasticity theory, harmonic motion, theory of heat and heat transfer, thermodynamics, wave motion, and sound.

### **PHYS 1112 - Introductory Physics II**

*Prerequisites:* PHYS 1111; PHYS 1111L. *Corequisite:* PHYS 1112L. This course includes a separate lab which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. The second of two algebra and trigonometry based courses in the physics sequence. Topics include material from electricity and magnetism (electric charge, electric forces and fields, electric potential energy, electric potential, capacitance, magnetism, electric current, resistance, basic electric circuits, alternating current circuits, and electromagnetic waves), geometric optics (reflection and refraction), and physical optics (interference and diffraction).

### PHYS 1112L - Introductory Physics Lab II

*Prerequisites:* PHYS 1111; PHYS 1111L. *Corequisite:* PHYS 1112. This course includes a separate classroom part which must be taken and completed successfully (grade C or better for Health program students) in order to successfully complete this course (grade C or better for Health program students). If both parts of this course are not completed successfully then both parts must be repeated until successful completion (grade C or better for Health program students) is achieved <u>simultaneously</u> in both. Selected laboratory exercises paralleling the topics in PHYS 1112. The laboratory exercises for this course include material from electricity and magnetism, geometric optics, and physical optics.

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# **PNSG 1020 - Pharmacology for Clinical Calculations**

Prerequisites: Program admission. Uses 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.

# **PNSG 1030 - Clinical Nutrition**

Prerequisites: Program admission. A study of the nutritional needs of the individual. Topics include: nutrients, standard and modified diets, enteral and parenteral nutrition, nutrition throughout the lifespan, and client education.

# **PNSG 1100 - Nursing Fundamentals**

Prerequisites: Program admission, ALHS 1011, ALHS 1040, ALHS 1090, ENGL 1010, MATH 1012, PSYC 1010. An introduction to the nursing process. Topics include: nursing as a profession; ethics and law: client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, and an introduction to physical assessment; geriatrics; customer/client relationships; and standard precautions.

# PNSG 1120 - Medical Surgical Nursing I

Prerequisites: PNSG 1020, PNSG 1030, PNSG 1100. 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; prevention of illness; care of the individual as a whole; pathological disorders and deviations from the normal state of health in the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; client care, treatment, pharmacology, and nutritional aspects related to the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; and standard precautions related to the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems.

# **PNSG 1122 - Medical Surgical Nursing Practicum I**

Prerequisites; PNSG 1020, PNSG 1030, PNSG 1100. Corequisite: PNSG 1120. Focuses on the clinical patient care aspects of 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; prevention of illness; care of the individual as a whole; pathological disorders 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.

# PNSG 1130 - Medical Surgical Nursing II

Prerequisite: PNSG 1120. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, pathological disorders 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.

# PNSG 1132 - Medical Surgical Nursing Practicum II

Prerequisites: PNSG 1120, PNSG 1122. Corequisite: PNSG 1030. Focuses on the clinical patient care aspects of health management and maintenance and the prevention of illness, care of the individual as a whole, pathological disorders 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.

# **PNSG 2010 - Introduction to Pharmacology and Clinical Calculations**

Prerequisites: Program admission. Applies fundamental mathematical concepts and includes basic drug administration. Emphasizes critical thinking skills. Topics include: systems of measurement, calculating drug problems, resource materials usage, fundamental pharmacology, administering medications in a simulated clinical environment, principles of IV therapy techniques, and client education.

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#### **PNSG 2030 - Nursing Fundamentals**

*Prerequisites:* Program admission. An introduction to the nursing process. Topics include: nursing as a profession; ethics and law; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, and an introduction to physical assessment; customer/client relationships; standard precautions; basic life support; infection control/bloodborne/airborne pathogens; and basic emergency care/first aid and triage.

#### **PNSG 2035 - Nursing Fundamentals Clinical**

*Prerequisites:* Program admission. An introduction to nursing practice in the clinical setting. Topics include but are not limited to: history taking, physical assessment, nursing process, critical thinking, activities of daily living, documentation, client education, and standard precautions.

### PNSG 2120 - Pediatric Nursing

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. Focuses on health management and maintenance and the prevention of illness, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; and standard precautions.

### **PNSG 2122 - Pediatric Nursing Practicum**

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. *Corequisite: PNSG 2120.* Focuses on the clinical patient care aspects of health management and maintenance and the prevention of illness, care of the family as a whole, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the normal state of health in the pediatric client; client care, treatment, pharmacology, medication administration, and diet therapy of the pediatric client; growth and development; and standard precautions.

#### **PNSG 2130 - Obstetric Nursing**

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. 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, pathological and nonpathological concerns in 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.

## PNSG 2132 - Obstetric Nursing Practicum

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. *Corequisite:* PNSG 2130. Focuses on clinical patient care aspects 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, pathological and nonpathological concerns in obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn; and standard precautions.

#### **PNSG 2150 - Nursing Leadership**

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include: application of the nursing process, supervisory skills, client education methods, group dynamics and conflict resolution.

#### **PNSG 2152 - Nursing Leadership Practicum**

*Prerequisites:* PNSG 1020, PNSG 1030, PNSG 1100. *Corequisite:* PNSG 2150. Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market, focusing on practical applications. Topics include: application of the nursing process, critical thinking, supervisory skills, client education methods, and group dynamics.

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### PNSG 2210 - Medical-Surgical Nursing I

Prerequisites: Program admission. Focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; as well as pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the cardiovascular, respiratory, and hematological and immunological systems.

### PNSG 2220 - Medical-Surgical Nursing II

Prerequisites: Program admission. This second course in a series of four focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; as well as pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the endocrine, gastrointestinal, and urinary system.

#### PNSG 2230 - Medical-Surgical Nursing III

Prerequisites: Program admission. This third course in a series of four focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; mental health; as well as pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the neurological, sensory, and musculoskeletal systems.

### PNSG 2240 - Medical-Surgical Nursing IV

Prerequisites; Program admission. This fourth course in a series of four courses focuses on client care including using the nursing process, performing assessments, using critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole, oncology; as well as pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to the integumentary and reproductive systems.

#### PNSG 2250 - Maternity Nursing

Prerequisites: Program admission. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, pathological and nonpathological concerns in obstetric clients and the newborn; client care, treatments, pharmacology, and diet therapy related to obstetric clients and the newborn; and standard precautions.

#### PNSG 2255 - Maternity Nursing Clinical

Prerequisites: Program admission, Focuses on clinical health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, providing client education, displaying cultural competence across the life span and with attention to special populations. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, pathological and nonpathological concerns in obstetric clients and the newborn; client care, treatments, pharmacology, and diet therapy related to obstetric clients and the newborn; and standard precautions.

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### PNSG 2310 - Medical-Surgical Nursing Clinical I

*Prerequisites:* Program admission. This first clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 412.5 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

#### PNSG 2320 - Medical-Surgical Nursing Clinical II

*Prerequisites:* Program admission. This second clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 412.5 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

### PNSG 2330 - Medical-Surgical Nursing Clinical III

*Prerequisites:* Program admission. This third clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 412.5 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

#### **PNSG 2340 - Medical-Surgical Nursing Clinical IV**

*Prerequisites:* Program admission. This fourth clinical course, in a series of four medical-surgical clinical courses, focuses on clinical client care including using the nursing process, performing assessments, applying critical thinking, engaging in client education and displaying cultural competence across the life span and with attention to special populations. At the completion of the four part sequence of these medical-surgical clinical courses students will have completed a minimum of 412.5 hours of clinical experience including 300 hours of comprehensive medical-surgical, 37.5 hours of maternal, 37.5 pediatric and 37.5 pediatric experiences. Topics include: health management and maintenance; prevention of illness; care of the individual as a whole; hygiene and personal care; mobility and biomechanics; fluid and electrolytes; oxygen care; perioperative care; immunology; mental health; and oncology. In addition pathological diseases, disorders and deviations from the normal state of health, client care, treatment, pharmacology, nutrition and standard precautions with regard to cardiovascular, hematological, immunological, respiratory, neurological, sensory, musculoskeletal, endocrine, gastrointestinal, urinary, integumentary and reproductive systems.

#### **PNSG 2410 - Nursing Leadership**

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*Prerequisites:* Program admission. Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include: application of the nursing process, supervisory skills, client education methods, group dynamics and conflict resolution.

#### **PNSG 2415 - Nursing Leadership Clinical**

*Prerequisites:* Program admission. Builds on the concepts presented in prior nursing courses and develops the clinical skills necessary for successful performance in the job market, focusing on practical applications. Topics include: application of the nursing process, critical thinking, supervisory skills, client education methods, and group dynamics.

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### **POLS 1101 – American Government**

Prerequisite: Program admission. Emphasizes study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, special interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

#### PSYC 1010 - Basic Psychology

Presents basic concepts within the field of psychology and their application to everyday human behavior, thinking, and emotion. Emphasis is placed on students understanding basic psychological principles and their application within the context of family, work and social interactions. Topics include an overview of psychology as a science, the nervous and sensory systems, learning and memory, motivation and emotion, intelligence, lifespan development, personality, psychological disorders and their treatment, stress and health, and social relations.

#### **PSYC 1101 - Introductory Psychology**

Prerequisite: Program admission. Introduces the major fields of contemporary psychology. Emphasis is on fundamental principles of psychology as a science. Topics include research design, the organization and operation of the nervous system, sensation and perception, learning and memory, motivation and emotion, thinking and intelligence, lifespan development, personality, psychopathology and interventions, stress and health, and social psychology.

#### **PSYC 2103 - Human Development**

Prerequisite: PSYC 1101. Emphasizes changes that occur during the human life cycle beginning with conception and continuing through late adulthood and death and emphasizes the scientific basis of our knowledge of human growth and development and the interactive forces of nature and nurture. Topics include but are not limited to theoretical perspectives and research methods, prenatal development and child birth, stages of development from infancy through late adulthood, and death and dying.

### PSYC 2250 – Abnormal Psychology

Prerequisite: PSYC 1101. Emphasizes the nature and causes of various forms of abnormal behavior. Topics include historical and contemporary approaches to psychopathology; approaches to clinical assessment and diagnosis; understanding and defining classifications of psychological disorders; and etiology and treatment considerations.

### **RADT 1010 - Introduction to Radiology**

Prerequisite: Program admission. Corequisites: RADT 1030; RADT 1320. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

#### RADT 1030 - Radiographic Procedures I

Prerequisites: Program admission; ALHS 1011 (Diploma) or Program admission, BIOL 2114, and BIOL 2114L (Degree). Prerequisite/Corequisite: RADT 1010. Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to body cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities.

#### **RADT 1060 - Radiographic Procedures II**

Prerequisites: RADT 1010; RADT 1030. Corequisite: RADT 1330. Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures; and minor procedures.

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#### **RADT 1070 - Principles of Imaging I**

*Prerequisites:* Program admission; MATH 1013 (Diploma) or Program admission; MATH 1111 (Degree). Content is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Factors that govern the image production process, film imaging with related accessories, and a basis for analyzing radiographic images. Included are the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Actual images will be included for analysis.

#### **RADT 1160 - Principles of Imaging II**

*Prerequisite:* RADT 1070. Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems, with a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. This content also provides a basic knowledge of quality control, principles of digital system quality assurance and maintenance are presented. Content is designed to provide entry-level radiography students with principles related to computed tomography (CT) imaging, and other imaging modalities (i.e., MRI, US, NM, Mammography) in terms of purpose, principles, equipment/material, and procedure. Topics include: imaging equipment, digital image acquisition and display, and basic principles of CT and other imaging modalities. Topics include: imaging equipment, digital image acquisition and display, and basic principles of CT and other imaging modalities.

### RADT 1200 - Principles of Radiation Biology and Protection

*Prerequisite:* Program admission. Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

### **RADT 1320 - Clinical Radiography I**

*Prerequisite/Corequisite:* RADT 1030. Introduces students to the hospital clinical setting and provides an opportunity for students to participate in or observe radiographic procedures. Topics include: orientation to hospital areas and procedures; orientation to mobile/surgery; orientation to radiography and fluoroscopy; participation in and/or observation of procedures related to body cavities, the shoulder girdle, and upper extremities. Activities of students are under direct supervision.

### **RADT 1330 - Clinical Radiography II**

*Prerequisites:* RADT 1010; RADT 1030; RADT 1320. *Corequisite:* RADT 1060. Continues introductory student learning experiences in the hospital setting. Topics include: equipment utilization; exposure techniques; attend to and/or observation of routine projections of the lower extremities, pelvic girdle, and spine; attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems; and attend to and/or observation of procedured under direct and indirect supervision.

#### **RADT 2090 - Radiographic Procedures III**

*Prerequisite:* RADT 1060. *Corequisites:* RADT 1330; RADT 2340. Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; sectional anatomy of the head, neck,thorax and abdomen.

### **RADT 2190 - Radiographic Pathology**

*Prerequisite:* ALHS 1011; RADT 1010 (Diploma) or BIOL 2114; BIOL 2114L; RADT 1010 (Degree). Content is designed to introduce the student to concepts related to disease and etiological considerations. Pathology and disease as they relate to various radiographic procedures are discussed with emphasis on radiographic appearance of disease and impact on exposure factor selection. Topics include: fundamentals of pathology, trauma/physical injury, and systematic classification of disease

### **RADT 2260 - Radiologic Technology Review**

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education

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### RADT 2340 - Clinical Radiography III

*Prerequisite:* RADT 1330. Provides students with continued hospital setting work experience. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care; behavioral and social competencies; performance and/or observation of minor special procedures, special equipment use, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

#### RADT 2350 - Clinical Radiography IV

*Prerequisite:* RADT 1010; RADT 2090; RADT 2340. 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, and genitourinary system procedures; and participation in and/or observation of radiography; and competency completion evaluation. Execution of radiographic procedures will be conducted under direct and indirect supervision.

#### RADT 2360 - Clinical Radiography V

*Prerequisite:* RADT 2350. *Corequisite:* RADT 2260. Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in all of the radiographic procedures courses and practiced in previous clinical radiography courses. Topics include: patient care; behavioral and social competency; advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; integration of procedures and/or observation of angiographic, interventional, minor special procedures; integration of procedures and/or observation of special equipment use; integration of procedures and/or observation of special equipment use; integration of angiographic competencies. Execution of radiographic procedures will be conducted under direct and indirect supervision.

#### RADT 2520 - Mammographic Anatomy, Physics and Positioning

*Prerequisite:* Program admission. *Corequisite:* RADT 2530. The student should have a pre-existing knowledge and skills gained during and entry-level radiography educational experience and reinforced through professional practice. The content in this course is intended to aid technologists in preparing for post primary practice of mammography. The course provides the student with an overview of the following topics: Breast anatomy and mammographic correlation, breast viability and pathology, correlative physical breast assessment, department organization and regulation, equipment, interventional procedures mammography quality management, positioning, sonomammography, and Technical applications.

#### **RADT 2530 - Clinical Mammography**

*Prerequisite:* Program admission. Content and clinical practice experiences should sequentially develop, apply, critically analyze, integrate, synthesize and evaluate concepts and theories used to perform radiologic procedures in mammography. Through structured, sequential, competency-based clinical assignments, students discuss, examine and evaluate concepts of team practice, patient-centered clinical practice and professional development. Clinical practice experience should teach students to provide care and assessment and competently perform radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, and after the radiologic procedure. Topics include: mammography clinical practice, patient preparation and education, mammographic procedure, quality control, interventional special procedures, and positioning.

#### **RDNT 1050 - Simulator Applications**

Geometric application of teletherapy setups to include quality assurance of simulator and treatment machine specification symmetry. Topics include: quality assurance of simulator and treatment machine specification symmetry.

#### **RDNT 1520 - Introduction to Radiation Therapy**

This course presents an overview of radiation therapy. Topics include: medical terminology, medical ethics and law, patient care, basic machine usage, the rationale of radiation therapy, responsibilities of the student, academic and administrative structure of the program, and the role of radiation therapy within the medical profession.

#### **RDNT 1540 - Radiation Therapy Physics**

A course designed to cover the basic classical and modern physics concepts required for a thorough knowledge of the physics involved in radiation therapy. Mathematics concepts required for the physics principles are introduced. Topics Include: basic classical and modern physics, physics involved in radiation therapy, mathematics concepts, and physics principles and introduction.

#### **RDNT 1560 - Radiation Therapy - Cross / Sectional Anatomy**

This course content is designed to study normal sectional anatomy via diagrams and radiologic images. Topics include: normal sectional anatomy (overview of CT, MR, PET, ultrasound and other sectional imaging modalities), anatomic planes of the body, and topographic anatomy (head/neck, chest, abdomen, male/ female pelvis, spine/extremities).

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#### RDNT 1580 - Oncology I

This course is an introduction to the concept of disease, type of growths, causative factors and biologic behavior of neoplastic disease. Staging procedures are introduced. The student is presented with an introduction to the specific malignant disease entities by site of occurrence. Disease processes and the treatment planning philosophy are discussed as well as the inter-relating of treatment planning with clinical radiation therapy. Topics include: introduction to the concept of disease and types of growths.

#### RDNT 1600 - Pathology

This course content is presented in three parts: general pathology, neoplastic, and clinical observations. General pathology introduces basic disease concepts, theories of disease causation, and system by system pathophysiologic disorders most frequently encountered in clinical practice. Neoplasia provides an in depth study of new and abnormal development and classification of both benign and malignant tumors and sitespecific information on malignant tumors is presented. Students will have the opportunity to participate in clinical observations of the front office and nursing in a radiation therapy department. Topics include: general pathology, neoplasia, clinical observation, basic disease concepts, theories of disease causation and pathophysicologic disorders.

#### **RDNT 1610 - Introduction to Clinical**

This course is designed to introduce the students to the use of office equipment, nursing equipment and procedures and observations of the treatment procedures and equipment. Students will have the opportunity to participate in clinical observations of the front office and nursing as well as patient treatment in a radiation therapy department. Topics include: front office, nursing, and observation of treatment rooms.

### **RDNT 1620 - Radiation Therapy Clinical I - Clinical Rotation**

This course is designed to introduce patient management and basic radiation therapy procedures in the clinical setting. Emphasis is place on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variation. Topics include: equipment, patient positions(simulation and delivery of radiation treatment) and adapting procedures to meet patient variation.

#### **RDNT 1640 - Quality Management**

Content is designed to focus on the evolution of quality management (QA) program and continuing quality improvement in Radiation Oncology. Topics include: introduction to the principles of quality management, treatment documentation, general conditions of patient care area, accessory devices/communication devices, computerization, treatment and simulation/localization units and localization/simulation unit.

#### **RDNT 1660 - Treatment Planning**

This course is designed to introduce patient management and basic radiation therapy procedures in the clinical setting. This course is designed to introduce patient management and basic radiation therapy procedures in the clinical setting. Topics include: isodose descriptions and general influencing factors; patient contours; radiobiologic dosmetric considerations; prevention of overdose and underdose; tissue compensators (2-D and 3-D compensation)(XYZ)-wedge filters (2-D compensations); clinical applications of treatment beams and accessories; and optimal treatment planning considerations, evaluation and implementation.

### **RDNT 1680 - Oncology II**

The second: of a two-course sequence in radiation oncology. A continuation to the concepts of disease, types of growths, causative factors, biologic behavior of neoplastic disease, and staging procedures. Plus: the continuation: to the specific malignant disease entities, by site of occurrence. Disease processes and the treatment planning philosophy are discussed as well as the inter-relating of treatment planning with clinical radiation therapy. Topics include: concepts of disease, types of growth, causative factors, biologic behavior of neoplastic, staging procedures, specific malignant disease/site of occurrence, disease processes and interrelating of treatment planning with clinical radiation therapy.

#### **RDNT 1720 - Radiation Therapy Clinical II - Clinical Rotation**

This course provides clinical experience in the use of equipment and patient positioning in both simulation and delivery of radiation therapy treatments. Emphasis is placed on the varied aspects of the radiation therapy department and patient progression through evaluation, treatment, and follow-up. Upon completion, student will be able to demonstrate successful completion of clinical objectives. Topics include: equipment, patient positioning(simulations and delivery of radiation treatment)and adapting procedures to meet patient variation.

#### **RDNT 1740 - Research Methods** This course discusses methods used in scientific and medical research. Topics include: specific elements of

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# the research progress and protocol, data interpretation, and application of results.

**RDNT 2760 - Advanced Radiation Techniques** 3 Content is designed to review and expand concepts and theories in the radiation physics course. Topics include: the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions, treatment units, measurement and quality of ionizing radiation, absorbed dose measurement, and dose distribution and scatter analysis.

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### **RDNT 2820 - Radiation Therapy Clinical III - Clinical Rotation**

This course is a continuation of the clinical experience in the use of equipment and patient positioning in both simulation and delivery of radiation therapy treatments. Emphasis is placed on the varied aspects of the radiation therapy department and patient progression through evaluation, treatment, and follow-up. Upon completion, student will be able to demonstrate successful completion of clinical objectives. Topics include equipment, patient positioning(simulation and delivery of radiation treatments) and adapting procedures to meet patient variation.

#### **RDNT 2860 - Concepts Integration and Review**

Integration of principles and tenets of radiation therapy concepts that have been presented throughout the curriculum. Topics include: review of principles of radiation therapy concepts and review of tenets of radiation therapy concepts.

#### READ 0096 - Reading I

*Prerequisite:* Appropriate entrance reading score. Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary skills, comprehension skills, and study skills.

#### **READ 0097 - Reading II**

*Prerequisite:* READ 0096, or appropriate entrance reading score. Emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills.

#### **READ 0098 - Reading III**

*Prerequisite:* READ 0097, or appropriate entrance reading score. 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.

#### **RESP 1110 - Pharmacology**

*Prerequisites:* Program admission; BIOL 2114; BIOL 2114L; MATH 1101 or MATH 1111. Introduces the physiologic and pharmacological basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology as they relate to the body systems. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, delivery systems, respiratory drugs, and cardiopulmonary system related drugs.

#### **RESP 1120 - Introduction to Respiratory Therapy**

*Prerequisites:* Program admission; BIOL 2114; BIOL 2114L; MATH 1101 or MATH 1111. *Corequisite:* RESP 1130; RESP 1193. Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, , humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

#### **RESP 1130 - Respiratory Therapy Lab I**

*Prerequisites:* Program admission; BIOL 2114; BIOL 2114L; MATH 1101 or MATH 1111. *Corequisite:* RESP 1120. Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment and simulated practice of basic respiratory care modalities. Topics include: patient assessment, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, airway clearance techniques, infection control procedures, and medical ethics.

#### **RESP 1193 - Cardiopulmonary Anatomy and Physiology**

*Prerequisites:* Program admission; BIOL 2114; BIOL 2114L; MATH 1101 or MATH 1111. Provides an in-depth study of cardiac and pulmonary anatomy and physiology, and the diagnostic procedures commonly used in the hospital to evaluate these systems. Emphasizes the heart-lung relationship and clinical applications of these phenomena in the cardiopulmonary system. Topics include: respiratory function; ventilatory mechanisms; gas transport; laboratory analysis; natural and chemical regulation of breathing; circulation, blood flow and pressure, and cardiac function; renal physiology and related topics.

### **RESP 2090 - Clinical Practices I**

*Prerequisite:* Program admission. *Prerequisites/Corequisites:* RESP 1110; RESP 1120; RESP 1130. Introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to clinical affiliate, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, inspiratory and expiratory PIP/PEP devices, patient assessment, and basic life support (BLS).

#### **RESP 2100 - Clinical Practice II**

*Prerequisite/Corequisite:* RESP 2090. Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

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### **RESP 2110 - Pulmonary Disease**

Prerequisite: Program admission. Prerequisites/Corequisites: RESP 1110; RESP 1193. Corequisite: RESP 1120. Provides students with information concerning assessment of etiology, pathophysiology, treatment, and prognosis of common cardiopulmonary, cardiovascular, and pulmonary diseases and conditions. Topics include: infectious diseases and conditions, respiratory diseases and conditions, neuromuscular diseases and conditions, cardiovascular diseases and conditions, sleep apnea, patient assessment, laboratory tests, chest radiographs, and trauma.

#### **RESP 2120 - Critical Respiratory Care**

Prerequisites: RESP 1120; RESP 1130. Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

#### **RESP 2130 - Mechanical Ventilation and Airway Management**

Prerequisites: RESP 1120; RESP 1130. Prerequisite/Corequisite: RESP 2120. Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

#### **RESP 2140 - Advanced Critical Care Monitoring**

Prerequisites: RESP 1120; RESP 1130; RESP 1193. Provides a study of advanced critical care techniques for hemodynamic and non invasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and non invasive monitoring techniques.

### **RESP 2150 - Pulmonary Function Testing**

Prerequisite: RESP 1193. Provides knowledge regarding normal and abnormal pulmonary functions. Emphasizes performance, interpretation, and evaluation of various pulmonary function studies. Topics include: pulmonary function testing, pulmonary function interpretation, pulmonary function evaluation, blood gas analysis, and polysomnography.

#### **RESP 2160 - Neonatal Pediatric Respiratory Care**

Prerequisites: RESP 2120; RESP 2130. Provides concepts on the processes of growth and development related to respiratory care from the fetus to the adolescent. Relates physiologic function to respiratory care assessment. Topics include: fetal growth and development, neonatal growth and development, fetal assessment, neonatal assessment, neonatal respiratory care, neonatal pathology, pediatric pathology, pediatric respiratory care, adolescent assessment, and adolescent respiratory care.

### **RESP 2170 - Advanced Respiratory Care Seminar**

Prerequisites: RESP 2120; RESP 2130. Review of respiratory therapy as it pertains to the national credential examinations administered by the NBRC. Emphasizes decision making and problem solving as they relate to clinical respiratory care. Topics include: medical ethics, basic computer literacy, CRTT exam preparation, and RRT exam preparation.

#### **RESP 2180 - Clinical Practice III**

Prerequisites: Program admission; RESP 2100. Continues development of proficiency levels in skills introduced in Clinical Practices I and II. In addition, intermittent positive pressure breathing, chest physiotherapy, and airway care are introduced. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

#### **RESP 2190 - Clinical Practice IV**

Prerequisite/Corequisite: RESP 2180. Continues development of proficiency levels in skills introduced in Clinical Practices I, II, and III. In addition, the student is introduced to critical respiratory care. Case presentations are required to integrate clinical and classroom theory. Topics include: intermittent positive pressure breathing, chest physiotherapy, airway care, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and respiratory care of the critical care patient.

#### **RESP 2200 - Clinical Practice V**

Prerequisite: RESP 2180. Prerequisites/Corequisites: RESP 2120; RESP 2130; RESP 2190. Continues development of skills required in the intensive care of the respiratory patient. Case presentations are required to integrate clinical and classroom theory. Topics include: basic respiratory care of critical care patients, airway management, ventilator monitoring, arterial blood collection, blood gas analysis, and EKG.

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### **RESP 2220 - Clinical Practice VI**

*Prerequisite/Corequisite:* RESP 2190. Provides students with an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided an opportunity for application and reinforcement of pediatric and neonatal intensive care, advanced diagnostics, and rehabilitation/home care. Topics include: mechanical ventilation initiation, patient stabilization, critical care monitoring, hemodynamic measurement, hemodynamic evaluation, bronchial hygiene, weaning mechanics, extubation, arterial line sampling, advanced diagnostics, pediatric/neonatal respiratory care, and rehabilitation/home care.

#### **RESP 2270 - Rehabilitation and Home Care**

*Prerequisite/Corequisite:* RESP 1120. Provides an overview of the concepts, procedures, and equipment used in rehabilitation and in the delivery of long-term care to persons with chronic pulmonary disorders. Topics include: cardiopulmonary rehabilitation/home care concepts, cardiopulmonary rehabilitation/home care procedures, and cardiopulmonary rehabilitation/home care equipment.

#### **RNSG 1110 - Fundamentals of Nursing**

*Prerequisites: Completion of all required non-nursing courses.* Through classroom, laboratory, and clinical experiences, this foundational nursing course introduces the student to concepts basic to nursing practice. Content presented includes foundations of nursing practice, health promotion and maintenance, promotion of activity and rest, health assessment throughout the lifespan, promotion of communication, the nursing process, promotion of psychosocial health, promotion of physiologic health, and medication administration. Beginning nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/ learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, disaster/emergency management, the health-illness continuum, and therapeutic interventions are introduced in RNSG 1110 and incorporated throughout the curriculum. The lecture and laboratory component of this course introduces the student to the application of the nursing process with an emphasis on psychomotor and psychosocial skills. In the clinical setting the student will apply learned knowledge and skills in providing nursing care for culturally diverse patients in long term care settings. The student focuses on direct care to promote the well-being of one assigned patient. This is a web enhanced course. Students may be required to access information, submit assignments, or test online through ANGEL.

### **RNSG 1120 - Dosage Calculations and Basic Pharmacology**

*Prerequisites: Program Admission. Corequisite: RNSG 1110.* This course introduces the student to basic principles of pharmacology and the basic mathematical concepts utilized in calculating medication dosages for safe administration to patients throughout the lifespan. Areas of emphasis include concepts of legal implications, pharmacokinetics, pharmacodynamics, calculation of drug dosages, and medication preparation. The student is also introduced to the role of the nurse in assessment, planning, intervention and evaluation of the care of the patient receiving pharmacologic therapy. This course is web-enhanced. Students may be required to access information, submit assignments, and test online through Angel.

#### RNSG 1130 - Lifespan Nursing Care I

*Prerequisites: RNSG 1110; RNSG 1120. Corequisite: RNSG 1140.* Lifespan Nursing Care I is offered in the second semester of the nursing program. This is the first of a three course sequence focusing on the nursing needs of individuals throughout the lifespan experiencing common, predictable alterations in function. Content presented includes nursing care of: the perioperative patient; the oncological patient; the patient with an infectious disease; and the patient with alterations in fluid/electrolyte and acid/base balance; gastrointestinal; hepatic and biliary; and, respiratory function. The conceptual threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, disaster/emergency management, the health-illness continuum, and therapeutic interventions are incorporated throughout the course. The lecture and laboratory component of this course introduces the student to the application of the nursing process to patients with appropriate interventions. Added emphasis is placed on goal setting and the evaluation of goal achievement. In the clinical setting, the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for one assigned culturally diverse patient in diverse care settings. This is a web enhanced course. Students may be required to access information, submit assignments, or test online through ANGEL.

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### **RNSG 1140 - Nursing Care to Promote Mental Health**

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Prerequisites: RNSG 1110; RNSG 1120. Corequisite: RNSG 1130. Nursing Care to Promote Mental Health is offered in the second semester of the first year of the nursing program. This course focuses on the nursing needs of culturally diverse individuals throughout the lifespan who are experiencing alterations in mental health. Content presented includes: basic concepts and foundations in mental health nursing; therapeutic approaches to mental health care; and nursing care of the patient with anxiety, schizophrenia, somatoform disorders, dissociative disorders, personality disorders, eating disorders, substance abuse disorders, mood disorders, aggressive behavior, and violent or abusive behavior. Additional content covered includes nursing care of the child, the adolescent, the elderly, and special needs populations with mental health disorders. Assessment of the mental health patient is introduced. The curriculum threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, the health illness continuum, therapeutic interventions, and disaster/emergency management continue to be incorporated throughout the course. The roles of the associate degree nurse as a provider of care, a manager of care, and a member of the discipline of nursing are discussed. The nurses role in the promotion and restoration of optimal mental health is included. The lecture and laboratory component of this course introduces the student to the application of the nursing process to patients with selected mental health alterations. Emphasis is placed on identification of psychosocial problems with appropriate therapeutic interventions and rationale. Emphasis on goal setting, evaluation of goal achievement, and prioritization of care is continued in this course. In the clinical setting, the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for one or more assigned culturally diverse patients in diverse care settings including acute, ambulatory and community experiences. The student will gain experience in the performance of nursing skills utilized in the care of patients with mental health alterations. The student continues to gain experience in collaborating with members of the health care team. This is a web enhanced course. Students may be required to access information, submit assignments, or test online through ANGEL.

#### **RNSG 2010 - LPN to ASN Transition**

Prerequisite: Admission to the ASN Transition Track; Completion of all required non-nursing courses. The LPN to ADN Transition course (RNSG 2010) is offered in the summer guarter prior to entering the second level of the nursing program. This course if designed to initiate the transition process from LPN to RN and builds upon previously learned basic knowledge and skills. The focus of RNSG 2010 is upon the nursing of individuals throughout the lifespan experiencing common predictable alterations in function. Content presented includes: the transition process; the nursing process; nursing care of the patient with oncology and pain, nursing care of the perioperative patient, alterations in respiratory function, alterations hepatic and biliary function, alterations in mental health. In addition, emergency/disaster management content is integrated. The conceptual threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/ learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, the health-illness continuum, therapeutic interventions, and emergency/ disaster management continue to be incorporated throughout the course. The student will be required to independently remediate in other areas of nursing that have been identified by the pre-entrance testing process as areas of weakness. The lecture and laboratory component applies the nursing process to patients with selected alterations in function which are considered complex. Emphasis is placed on identification of physiological and psychosocial problems with appropriate interventions, goal setting, and the evaluation of goal achievement. In the clinical setting the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for one or more assigned culturally diverse patients of all ages in acute care settings. This is a web enhanced course. Students may be required to access information, submit assignments, and test online through ANGEL.

#### **RNSG 2110 - Lifespan Nursing Care II**

Prerequisites: RNSG 1130; RNSG 1140. Lifespan Nursing Care II is offered in the third semester of the nursing program. It is the second course of a three course sequence focusing on the nursing needs of individuals throughout the lifespan experiencing common, predictable alterations in function. Content presented includes nursing care of the patient with alterations in: sensorineural function; hematological function; peripheral vascular function; cardiac function; urinary/renal function; and, glucose metabolism. The conceptual threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, disaster/ emergency management the health-illness continuum, and therapeutic interventions continue to be incorporated throughout the course. The lecture and laboratory component of this course introduces the student to the application of the nursing process to patients with selected alterations in function which are considered more complex. Emphasis is placed on identification of both physiological and psychosocial problems with appropriate interventions. Continued emphasis is placed on goal setting and the evaluation of goal achievement. In the clinical setting the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for one or more assigned culturally diverse patients of all ages in diverse care settings including acute, ambulatory, and community experiences. This is a web enhanced course. Students may be required to access information, submit assignments, and test online through ANGEL.

#### **RNSG 2120 - Nursing Care of the Childbearing Family**

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Prerequisites: RNSG 1130; RNSG 1140. Corequisite: RNSG 2110. Nursing Care of the Childbearing Family is offered in the fall semester of the second year of the nursing program. This course focuses on the nursing needs of culturally diverse individuals experiencing pregnancy, childbirth, and the post partum period as well as women's health alterations. Growth and development from conception through the fetal period is presented. Nursing needs of the infant up to 1 year is also emphasized. Assessment of the maternity patient and the newborn are introduced. Social, legal, and ethical issues related to reproduction are explored. The curriculum threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, the health illness continuum, therapeutic interventions, and disaster/emergency management continue to be incorporated throughout the course. The roles of the associate degree nurse as a provider of care, a manager of care, and a member of the discipline of nursing are discussed. The nurse's role in the promotion and restoration of optimal health is included. The lecture and laboratory component of this course introduces the student to the application of the nursing process to patients during pregnancy, childbirth, and the postpartum period and to patients with selected womens health alterations. Emphasis on identification of physiological and psychosocial problems, goal setting, selection of appropriate therapeutic interventions and rationale, and evaluation of goal achievement is continued in this course. Prioritization of nursing diagnoses is introduced. In the clinical setting, the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for one or more assigned culturally diverse patients and their families in diverse acute care settings. The student will gain experience in the performance of nursing skills utilized in the care of female and newborn patients. The student continues to gain experience in collaborating with members of the health care team. This is a web enhanced course. Students may be required to access information. submit assignments, or test online through ANGEL.

#### RNSG 2130 - Lifespan Nursing Care III

Prerequisites: RNSG 2110; RNSG 2120. Corequisite: RNSG 2140. Lifespan Nursing Care III is the third and last course in the lifespan nursing course sequence and is offered in the last semester of the nursing program. This course focuses on the nursing needs of culturally diverse individuals throughout the lifespan who are experiencing more complex but predictable alterations in function. It is a capstone course providing comprehensive application of acquired nursing knowledge. Content presented includes nursing care of the patient with alterations in integumentary function, endocrine function, immunological function, and neurological function. Additional content covered includes critical care, disaster, and emergency nursing topics. The curriculum threads of nutrition, pharmacology, growth and development, communication, cultural diversity, teaching/learning process, nursing process/critical thinking, legal/ethical factors, technological competence, safety, the health illness continuum, therapeutic interventions, and disaster/emergency management continue to be incorporated throughout the course. The roles of the associate degree nurse as a provider of care, a manager of care, and a member of the discipline of nursing are discussed. The nurses role in the promotion and restoration of optimal health is included. The lecture and laboratory component of this course introduces the student to the application of the nursing process to patients with selected alterations in function which are considered most complex. Management of patients in emergency and disaster situations is introduced. Emphasis on identification of physiological and psychosocial problems, goal setting, selection of appropriate therapeutic interventions and rationale, evaluation of goal achievement, and prioritization of care is continued in this course. In the clinical setting, the student will apply learned knowledge and psychomotor/psychosocial skills in providing nursing care for multiple culturally diverse patients and their families in diverse acute care settings under the supervision of a preceptor. The preceptor will serve as a mentor to facilitate the student's transition from school to the practice setting. The student will gain experience in the performance of nursing skills utilized in the care of patients with more complex alterations in function and in the care of critically ill patients. The student continues to gain experience in collaborating with members of the health care team and with patients family and/or significant other. This is a web-enhanced course. The student may be required to access information, submit assignments and test online. This is a web enhanced course. Students may be required to access information, submit assignments, and test online through ANGEL.

#### **RNSG 2140 - Capstone Nursing Seminar**

*Prerequisites: RNSG 2110; RNSG 2120. Corequisite: RNSG 2130.* This is a non-clinical course designed to facilitate the role transition from nursing student to novice registered nurse generalist. Focus is placed on principles of management, leadership, delegation, and professional development. Employment principles and practice and the responsibility of the nurse to the community and the nursing profession are included. Trends and issues related to legal, ethical, economic, and political influences on the health care delivery system are discussed. The curricular threads of communication, nursing process/critical thinking, legal/ethical factors, and technological competence are incorporated throughout the course. The course concludes with readiness testing in preparation for the NCLEX-RN. This is a web-enhanced course. Students may be required to access information, submit assignments, and test online through ANGEL.

#### SOCI 1101 - Introduction To Sociology

*Prerequisite:* Program Admission. Explores the sociological analysis of society, its culture, and structure. Sociology is presented as a science with emphasis placed on its methodology and theoretical foundations. Topics include basic sociological concepts, socialization, social interaction and culture, social groups and institutions, deviance and social control, social stratification, social change, and marriage and family.

#### SOCW 2000 - Introduction To Social Work

Prerequisite: Program Admission. This course provides an introduction to social welfare institution and the profession of social work. It focuses on the values, ethics, and methods of generalist social work practice with an emphasis on diversity. Students will be introduced to basic social welfare policies, community agencies, and at-risk populations.

#### SOCW 2010 - Introduction To Case Management

Prerequisite: Program Admission. A practical course in the how to of human service case management. Students will learn the step-by-step process of case management from the initial referral for services, determination of eligibility for services, writing a formal plan for services, case documentation techniques, and techniques for monitoring a clients progress through the service delivery system, to case closure/follow-up activities. This course will include how to access community resources, how to interpret and utilize information from other professionals, and the development of interviewing, intervention, case recording, and caseload management skills. Legal and ethical issues in service delivery will also be discussed.

#### SOCW 2020 - Human Behavior and the Social Environment

Prerequisite: SOCW2000. Corequisite: SOCW 2110, PSYC 2103. This course provides an overview of multicultural and critical perspectives on understanding: individuals, families, and their interpersonal and group relationships; life span development; and theories of well-being, stress, coping, and adaptation. Students learn to address biopsychosocial influences on human functioning.

#### SOCW 2030 - Interviewing Techniques with Individuals

Prerequisite: SOCW 2000, SOCW 2120. This course is offered as a beginning general foundation class and focuses on social work practice with individuals. It will emphasize the initial contact and rapport building skills utilized in partnering with clients in the social work process, interviewing skills and counseling techniques along with the assessment of a clients situation, and determination of the appropriate level of intervention for the change effort. Students will be expected to participate in interpersonal sharing and activities. Additional areas of study include: interviewing for assessment, the person in environment perspective, motivational interviewing, and ethical framework for practice.

#### SOCW 2040 - Behavioral Health and Community Services

Prerequisite: Program Admission. This course examines various modalities for assessing and intervening with children and adolescents with special needs. The course focuses on problem assessment, topics of intervention strategies, techniques and methods for determining the effectiveness of interventions with children and adolescents.

#### SOCW 2050 - Group Work Intervention

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Prerequisite: Program Admission. This course will provide students with a foundational understanding of the knowledge and skills required to participate in and lead small groups in a variety of settings. The course emphasizes an experiential approach which will provide students with the opportunity to develop skills in planning, facilitating, organizing, and evaluating the success of groups in micro and macro practice. Students will learn about the basic issues in group work and how to design groups for and work with children, youth, and adults. Emphasis will be placed on exploration and application of group work theory, principles and practices of group counseling, stages of group development, group dynamics, and group leadership. The latest research, ethical guidelines, and practices in group work will be examined and applied. Students will explore the interaction between groups and systems with their external environments and learn about concepts, theories, and methods and skills relevant to group work with diverse populations. Application of group work methods with at-risk populations will also be explored.

#### SOCW 2060 - Child and Adolescent Behaviors and Interventions

Prerequisite: SOCW 2110. This course examines various modalities for assessing and interviewing with children and adolescents. It focuses on Bio-psychosocial changes, interpersonal relationships and the individuals ability to relate to the social environment. Topics include: child maltreatment, teen parenting, delinquency, violent behavior, school dropout, suicide, substance abuse, and runaway behavior.

#### SOCW 2070 - Social Policies and Programs for the Aging

Prerequisite: Program Admission. This course explores the aging process and the experience of aging from a variety of perspectives. Physiological psychological and socio-culturally. Emphasis is placed on understanding the normative changes associated with the aging process, as well as the ways in which those changes are experienced personally and socially. Issues that will be reviewed include the realities of aging on our society; issues around health and emotional well being and aging, including life adjustments, physical health and mental problems and changes in physical appearance; and a look into the future of aging.

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#### SOCW 2080 - Social Work Field Practicum I

Prerequisite: Program Admission. The field practicum is an educationally focused, guided field experience in which students engage in community-based practice with individuals, families, and/or communities. Students gain experience with various social work roles, such as advocate, broker, and counselor. Students learn to function as professional generalists social workers in an organizational setting, to demonstrate an understanding of and behavior consistent with the NASW Code of Ethics, and to increasingly assume professional responsibility. Special emphasis is placed on the identification of specific needs, the empowerment of diverse populations at the micro and mezzo levels, and a keen awareness of social justice issues. Students will be under the supervision of the Social Work program faculty and/or persons designated to coordinate work experience arrangements.

#### SOCW 2081 - Social Work Field Practicum

Prerequisite: SOCW 2000, SOCW 2120. Corequisite: SOCW 2100. The field practicum is an educationally focused, guided field experience in which students engage in community-based practice with individuals, families and /or communities. Students gain experience that prepares them to work under general supervision to coordinate or perform eligibility determinations and other related activities associated with Medicaid benefits for the aged, blind, and disabled. Students will learn about the economic support component of social work, including Family Medicaid, Food Stamps, and Temporary Assistance for Needy Families(TANF). Students will also learn how to serve as liaisons with community, state, and federal agencies to coordinate client benefits and services. Preceptors from DFCS will oversee students in the internship.

#### SOCW 2090 - Social Work Field Practicum II

Prerequisite: SOCW 2080. Corequisite: SOCW 2060. The field practicum is an educationally focused, guided field experience in which students engage in community-based practice with individuals, families, and/or communities. Students gain experience with various social work roles, such as advocate, broker, and counselor. Students learn to function as professional generalist social workers in an organizational setting, to demonstrate an understanding of and behavior consistent with the NASW Code of Ethics, and to increasingly assume professional responsibility. Special emphasis is placed on the identification of specific needs, the empowerment of diverse populations at the micro and mezzo levels, and a keen awareness of social justice issues. Students will be under the supervision of the Social Work program, faculty and/or persons designated to coordinate work experience arrangements.

#### SOCW 2100 - Leadership and Community Services

Prerequisite: SOCW 2000, SOCW 2010, SOCW 2120. Corequisite: SOCW 2110. This course is designed to prepare students for a lifetime of engaged, responsible and active community involvement and leadership. In class, students will learn about leadership skills and styles and how to most effectively assess and assist organizations in their community. Outside of class, students will be required to provide volunteer service to an approved placement site in their local community for an approved number of hours.

#### SOCW 2110 - Case Management with Families

Prerequisite: SOCW 2010. Corequisite: SOCW 2000, SOCW 2100. This course focuses on initial introduction to the concept of families throughout the human life cycle. Using a biopychosocial approach, the course explores the changing family structure from initial courtship and marriage, having infants and toddlers, young children, teenagers, adult children, and grandparenthood along with caring for elderly parents and relations. Influences upon family (economic, cultural, ethnic, etc.) along with changes to traditional family structures (single parent, gay/lesbian, divorce) will be explored. As a clinical practice course, students will be expected to participate in interpersonal sharing and activities.

#### SOCW 2120 - Multicultural Issues

Prerequisite: Program Admission. This course provides students with knowledge and skills to work with physically, socio-economically, mentally, psychologically, and economically disadvantaged and oppressed people. Attention is given to ethnic minorities of color, women, people with disabilities, gay and lesbian people, the poor, and the oppressed. A multi-dimensional, cross-cultural framework is introduced for assessments and interventions with consumers from diverse groups. Students learn to identify and emphasize the adaptive capabilities and strengths of disadvantaged and oppressed people.

#### SOCW 2130 - Social Welfare and Community Service

Prerequisite: Program Admission. Introduction to the basic concepts, information and practices within the field of social services. Topics include a survey of the historical development of social services; social, legal and clinical definitions; and review of current information regarding indications for and methods of treatment and/or services. Students will be required to provide volunteer service to an approved placement site in their local community for an approved number of hours.

#### SPCH 1101 - Public Speaking

Prerequisite: Program admission: ENGL 098. Introduces the student to the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, analysis of ideas presented by others, and professionalism.

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#### SURG 1010 - Introduction to Surgical Technology

*Prerequisites:* Program admission. 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; biomedical principles; asepsis and the surgical environment; basic instrumentation and equipment; principles of the sterilization process; application of sterilization principles; and minimally invasive surgery.

#### SURG 1020 - Principles of Surgical Technology

*Prerequisite:* Program admission. Provides continued study of surgical team participation by wound management and technological sciences for the operating room. Topics include: biophysical diversities and needs; pre-operative routine; intra-operative routine; wound management; post-operative patient care; and outpatient surgical procedures.

#### SURG 1080 - Surgical Microbiology

*Prerequisite:* Program admission. Introduces the fundamentals of surgical microbiology. Topics include: historical development of microbiology; microscopes; cell structure and theory; microbial function and classification; human and pathogen relationships, infectious processes and terminology; defense mechanisms; infection control and principles of microbial control and destruction.

#### SURG 1100 - Surgical Pharmacology

*Prerequisite:* Program admission. Introduces the fundamentals of intra-operative pharmacology, and emphasizes concepts of anesthesia administration. Topics include: weights and measurements, drug conversions, interpretation of drug orders, legal aspects of drug administration, intra-operative pharmacologic agents, and anesthesia fundamentals.

#### SURG 1120 - Introductory Surgical Practicum I

*Prerequisites:* Program admission. Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include: scrubbing, gowning, gloving, and draping; assistance with patient care; processing of instruments and supplies; maintenance of a sterile field; and environmental sanitation.

#### SURG 1130 - Introductory Surgical Practicum II

*Prerequisites:* Program admission. Continues to orient students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include: scrubbing, gowning, gloving, and draping; assistance with patient care; processing of instruments and supplies; maintenance of a sterile field; and environmental sanitation.

#### SURG 2030 - Surgical Procedures I

*Prerequisites:* SURG 1010, SURG 1020. Introduces the core general procedures, including the following: incisions; wound closure; operative pathology; and common complications as applied to general and specialty surgery. Topics include: introduction to surgical procedures; general surgery and special techniques; obstetrical and gynecological surgery; gastrointestinal surgery; genitourinary surgery; and otorhinolaryngologic surgery.

#### SURG 2040 - Surgical Procedures II

*Prerequisite:* SURG 2030. Continues development of student knowledge and skills applicable to specialty surgery areas. Topics include: ophthalmic surgery; thoracic surgery; vascular surgery; cardiovascular surgery; neurosurgery; and plastic and reconstructive surgery.

#### SURG 2120 - Specialty Surgical Practicum I

*Prerequisites:* SURG 1130. Introduces the 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.

#### SURG 2130 - Specialty Surgical Practicum II

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*Prerequisite:* SURG 1130. Continues the introduction the 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, gastro-intestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

#### SURG 2140 - Advanced Specialty Surgical Practicum I

*Prerequisite:* SURG 2130. Provides opportunities for students to complete all required Surgical Technology procedures through active participation in surgery in the clinical setting. Topics include: independent case preparation and implementation of intra-operative skills as 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 intra-operative skills; and demonstration of employability skills.

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#### SURG 2150 - Advanced Specialty Surgical Practicum II

*Prerequisite:* SURG 2130. Continues to provide opportunities for students to complete all required Surgical Technology procedures through active participation in surgery in the clinical setting. Topics include: independent case preparation and implementation of intra-operative skills as primary scrub on specialty surgical procedures; participation as a surgical team conducting ophthalmic, orthopedic, thoracic, vascular, cardio-vascular, and neurosurgery procedures; independent case preparation and implementative skills.

#### SURG 2240 - Seminar in Surgical Technology

*Prerequisite:* Program admission. Prepares students for entry into careers as surgical technologists and enables them to effectively prepare for the national certification examination. Topics include: professional credentialing, certification review, and test-taking skills.

#### VAST 1040 - Vascular I

*Prerequisites:* Program Admission; VAST 1100. *Corequisite:* VAST 1050. This course will provide an understanding of the extremity arterial and venous anatomy, physiology, pathology, hemodynamic and symptomatology. The physical exam and clinical assessment of patients with acute and chronic extremity occlusive disease will be discussed. Topics include: extremity venous anatomy; extremity venous physiology, pathology, symptomatology, and hemodynamics; physical assessment for venous signs; performing history for venous symptoms; performing physiologic venous testing; performing extremity venous duplex; laboratory results and correlative (other) testing relevant to venous disease; treatment of extremity venous disease; extremity arterial anatomy; extremity arterial physiology, pathology, symptomatology; and hemodynamics; physical assessment for arterial signs; performing history for arterial signs; performing history for arterial symptoms; performing physiologic arterial testing; performing extremity arterial duplex; laboratory results and correlative (other) testing relevant to arterial disease; and treatment of extremity arterial disease.

#### VAST 1050 - Clinic I - Introduction to the Clinical Environment

*Prerequisites:* Program Admission; VAST 1100. *Corequisite:* VAST 1040. Provides an introduction for the student to observe and begin to participate in the diagnostic procedures performed in the noninvasive vascular laboratory. Procedures are performed under the direct supervision of an appropriately credentialed technologist. Topics include: equipment utilization; patient history, identifying risk factors, and contributing disease; procedural skills and patient care; extremity venous vascular procedures, cerebrovascular testing, indirect testing, and proper ergonomic scanning.

#### VAST 1100 - Vascular Fundamentals

*Prerequisite:* Program admission. This course introduces the basic principles and applications of physical assessment of non-invasive cardiovascular procedures. Topics include: history of diagnostic medical sonography; role of the sonographer; learning tools and techniques; basic medical techniques and patient care; infection control and universal precautions; verbal and non-verbal communication skills; grieving process; informed patient consent; health care delivery models; resource and educational options for sonographers, vital signs; patient preparations, maintenance of clinical records; Maslows Hierarchy of Needs; legal issues; HIPPA regulations and patients rights in medical care, employee/employer relationships; sonographic terminology; proper ergonomics and patient transfer methods; routine scanning planes; standard patient positions; instrumentation and image manipulation; and Doppler principles.

#### VAST 2030 - Essentials of Echocardiography

*Prerequisite:* Program admission. This course is designed as an introduction into the field of echocardiography. The general practitioner will be required to perform standard 2D examinations of the heart including B-mode, M-Mode and Doppler. The broader field of echocardiography will be introduced but not studied at length or in depth. Emphasis is on the functional workings and settings associated with basic Images and measurements. Topics include: introduction to measurements, basic tomographic windows, chamber and great vessel dimensions, systole; patient and equipment skills including proper body mechanics; physical principles, Doppler, and instrumentation; tomographic anatomy; and safety procedures and universal precautions.

#### VAST 2050 - Vascular II

*Prerequisite:* VAST 1040. *Corequisite:* VAST 2060. This course provides an understanding of cerebrovascular noninvasive diagnosis. Topics include: anatomy of extra cranial and intracranial vessels; pathology, physiology, and symptomatology of cerebrovascular disease; physical exam and clinical assessment of cerebrovascular disease; history taking in cerebrovascular disease; performance of Carotid Duplex/color imaging/CW Doppler & transcranial Doppler (imaging and non-imaging); correlative (other) imaging; and treatment of cerebrovascular disease.

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#### VAST 2060 - Vascular Clinical II

Prerequisites: VAST 1040; VAST 1050. Corequisite: VAST 2050. Provides the student opportunities to observe and participate in the diagnostic procedures performed in the noninvasive vascular laboratory and radiology departments that are clinical affiliates. Procedures are performed under the direct supervision of an appropriately credentialed technologist. Topics include: equipment utilization; patient history, identifying risk factors, and contributing disease; procedural skills and patient care; extremity venous vascular procedures, physiologic and duplex extremity arterial testing, cerebrovascular procedures (carotid and TCD) and proper ergonomic scanning.

#### VAST 2070 - Vascular III

Prereauisites: VAST 2050: VAST 2060. Coreauisite: VAST 2080. This course teaches techniques of abdominal duplex and utilization of duplex ultrasound in therapeutic and surgical vascular exams. Arterial and venous duplex of abdominal vessels is included. Topics include: anatomy, physiology, pathology, symptomology of abdominal/pelvic vasculature; duplex abdominal aorta/illac/pelvic arteries (male(impotence) and female); duplex renal arterylvein; duplex mesenteric arterylvein; duplex portal/hepatic veins; duplex IVC and iliac veins; therapeutic procedures; intra-operative duplex; vascular localization (sonographic guidance); vascular non-sonographic interventional procedures; maintaining clean and sterile environment; contrast media in medical imaging (radiologic and ultrasound); non-invasive test validation; history taking and assessment of abdominal arterial and venous disease.

#### VAST 2080 - Vascular Clinical III

8 Prerequisite: VAST 2060. Corequisite: VAST 2070. This course provides opportunities for the student to participate in and perform with assistance procedures performed in noninvasive vascular laboratories, radiology departments, imaging centers, and surgical departments. Continued participation by the student will progressively lead to the unassisted performance of diagnostic procedures under the supervision of an appropriately credentialed technologist. Emphasis is placed on medical therapy, surgical therapy, and other diagnostic tests performed in settings other than vascular laboratories. Topics include: equipment utilization; patient history; procedural skills and patient care; cerebrovascular procedures; therapeutic intervention; diagnostic tests for vascular diseases; carotid, arterial, venous, TCD, abdominal duplex, imaging and measuring abdominal organs and recognizing normal and abnormal echo patterns.

#### VAST 2090 - Vascular Clinical IV - Externship

Prerequisite: VAST 2070. Corequisite: VAST 2100. This course provides a culminating clinical setting experience which allows students to analyze information and procedural instruction provided throughout the program. In a variety of settings, students perform all noninvasive vascular procedures independently with the supervision of an appropriately credentialed technologist. They also participate in procedures such as abdominal and visceral, extremity venous, extremity arterial, and cerebrovascular. Emphasis is placed on skill level improvement and final completion of all required clinical competencies presented in previous courses and practiced in previous clinical vascular courses. Topics include: professional conduct; infection control techniques; patient history; imaging and measuring abdominal organs and recognizing normal and abnormal echo patter; scope of practice of a vascular technologist; transporting patients; duplex, indirect, and TCD machine utilization; equipment utilization; procedural skills and patient care; and vascular procedures.

#### VAST 2100 - Advanced Vascular Technology Registry Review

Prerequisite: VAST 2070. Corequisite: VAST 2090. This course will be an overall review of Vascular Ultrasound Technology. Topics include: normal and abnormal vascular anatomy, pharmacology, patholophysiology, physics/hemodynamics, test validation and measurements, vascular diagnostic procedures and laboratory values.

#### WELD 1000 - Introduction to Welding Technology

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.

#### WELD 1010 - Oxyfuel Cutting

Corequisite: WELD 1000. 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.

### WELD 1030 - Blueprint Reading for Welding Technology

Corequisite: WELD 1000. This course introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. An emphasis is placed on identifying types of welds, and the associated abbreviations and symbols.

#### WELD 1040 - Flat Shielded Metal Arc Welding

Corequisite: WELD 1000. This course introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in flat positions. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial welds.

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### WELD 1050 - Horizontal Shielded Metal Arc Welding

Corequisite: WELD 1040. 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.

### WELD 1060 - Vertical Shielded Metal Arc Welding

Corequisites: WELD 1040; WELD 1050. 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.

### WELD 1070 - Overhead Shielded Metal Arc Welding

Corequisite: WELD 1060. 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.

### WELD 1090 - Gas Metal Arc Welding

Corequisite: WELD 1000. 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.

### WELD 1110 - Gas Tungsten Arc Welding

Corequisite: WELD 1000. 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.

#### WELD 1120 - Preparation for Industrial Oualification

Prereauisites: WELD 1040; WELD 1070; WELD 1090; WELD 1110. Introduces industrial gualification methods. procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

#### WELD 1150 - Advanced Gas Tungsten Arc Welding

Prerequisite: WELD 1000. 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

#### WELD 1151 - Fabrication Processes

Prerequisite: WELD 1030. Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

### WELD 1152 - Pipe Welding

Prerequisite: Program admission. Provides the opportunity to apply skills to pipe welding operations. Topics include: pipe welding safety and health practices, pipe welding nomenclature, pipe layout and preparation, pipe joint assembly, horizontal welds on pipe (2G), vertical welds on pipe (5G), and welds on 45 degree angle pipe (6G).

#### WELD 1153 - Flux Cored Arc Welding

Prerequisite: WELD 1000. Provides knowledge of theory, safety practices, equipment, and techniques required for successful flux cored arc welding (FCAW). Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standards welds. Topics include: FCAW safety and health practices, FCAW theory, machine set up and operation, shielded gas selection, and FCAW joints in all positions.

#### WELD 1154 - Plasma Cutting

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Prerequisite: WELD 1000. Provides knowledge of theory, safety practices, equipment, and techniques required for plasma cutting. Topics include: safety practices; plasma torch and theory; plasma machine set up and operation; and plasma cutting techniques.

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#### WELD 1156 - Ornamental Iron Works

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*Prerequisites:* WELD 1010; WELD 1030; WELD 1040; WELD 1090. Provides an introduction to ornamental ironworks with emphasis on safety practices, equipment and ornamental ironwork techniques. Topics include: introduction to ornamental ironworks and safety practices; use of scroll machine, and use of bar twister.

#### WELD 1330 - Metal Welding and Cutting Techniques

*Prerequisite:* Provisional admission. This course provides instruction in the fundamentals of metal welding and cutting techniques. Instruction is provided in safety and health practices, metal fabrication preparation, and metal fabrication procedures.

Georgia Northwestern Technical College Catalog

# Faculty and Leadership

# FULL-TIME FACULTY

### Note: See www.gntc.edu for faculty contact information.

- Adams, Tony Program Director and Instructor, Criminal Justice. M.P.A., Jacksonville State University; B.S., Jacksonville State University
- Amos, Angie Instructor, Adult Education. B.S., Berry College
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- Baker, Judy Instructor, Associate Degree Nursing. M.S.N., University of Texas at Arlington B.S.N, Goshen College; M.A.T., Tarleton State University
- Barnor, Nee Q. Clinical Coordinator and Instructor, Ultrasound Programs. M.S., University of London; B.S., University of Science and Technology; Diploma, Montgomery College
- Beam, Graceful Instructor, Business Management. M.A., University of Phoenix; B.A., Metropolitan State College of Denver
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- Blalock, Charles Instructor, General Education, (Mathematics) D.Min., Covington Theological Seminary; Ed.S., University of Georgia; M.Ed. University of Georgia; B.S., Berry College
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- Vick, Ronald Instructor, Computer Information Systems. M.S.C.I.T., Regis University; B.A., Freed-Hardeman College; Diploma, Coosa Valley Technical College; Technical Certificate of Credit, North Metro Technical College

- Walker, K. Stanley Program Director and Instructor, Accounting. M.B.A., Kennesaw State University; B.S., Shorter College
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